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URBAN RISK COMMUNICATION IN AHMEDABAD - INDIA

BETWEEN SLUM DWELLERS AND THE MUNICIPAL CORPORATION

Thesis submitted to University of London
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DOCTOR OF PHILOSOPHY

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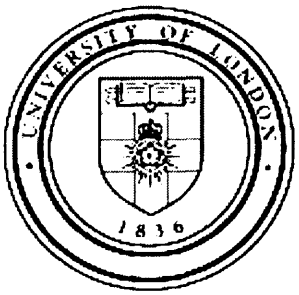

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DECLARATION

I, Christoph Woiwode, confirm that the work presented in this thesis, entitled 'Urban Risk Communication in Ahmedabad (India) between Slum Dwellers and the Municipal Corporation', is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis. This thesis has not been previously submitted for any degree of this or any other university.

this thesis is dedicated to

my parents

and

my wife

Since rapid urban growth forces poor households to settle in highly congested urban areas, slum dwellers are increasingly vulnerable due to a multiplicity of hazards rooted in the environment, nature, health, society and the urban economy. Hitherto, the understanding of urban risks and the vulnerability of inhabitants has been an underrepresented subject in urban planning. The different reasoning and rationales of slum dwellers, municipal authorities and other actors provide each with different perceptions of risks.

This study focuses on the communication of urban risks between two slum communities and the Municipal Corporation of Ahmedabad by examining endeavours in slum improvement and more responsive urban governance. In using a conceptual framework that synthesises socio-cultural approaches to risk, communication theories and collaborative planning theory, the thesis points out the deficiencies and potentials of risk communication in long-term urban development planning.

Currently urban risk management is not recognised as an integrated, cross-sectoral topic by the Municipal Corporation. Due to the structural fabric of the administration and the lack of capacity and guidance, the notion of risk is based on conventional approaches to disaster risk management with responsibilities spread across various departments. By contrast, slum dwellers have a much more integrated understanding of the micro-level risk conditions in which they live and work.

The findings of this study suggest that a meaningful two-way communication process can only take place if the interaction of stakeholders is understood in terms of human relationships that go beyond techno-bureaucratic co-ordination and the prevalent notion of mono-directional communication. This concept of communication is underpinned by values such as trust, fairness, credibility and justice in interaction in the context of urban governance.

The research approach and the findings suggest areas for improved policy making and further research. The outcome of the research especially contributes to a better understanding of urban risk situations in the social and cultural contexts of poor communities in India. Hence this investigation may be viewed as a potential basis for generating practical guidelines for mitigation policies and their links to urban governance.

Writing a thesis is an adventure one starts without exactly knowing where it will end. On the one side, it is this inherent nature of doing research that triggered my interest in 'going for it', on the other it was the seductive imagination to combine my two areas of study – anthropology and urban planning – the way I wanted it, so to say with (almost) no limits. The trajectory of the thesis is not only defined by the various fields of thinking I encountered, it is also a trajectory of places, starting from London, Ahmedabad, Berlin and lastly Colombo, which all more or less influenced its spirit.

More specifically, this thesis owes its existence to two circumstances that guided me to venture into empirical social research. Firstly, my initial visit to India as a student of urban planning and social anthropology brought me to Ahmedabad in 1997 to work with Foundation for Public Interest (FPI) and Disaster Mitigation Institute (DMI). It sparked off a deep interest in the sphere of grassroots level social work, people's participation and action planning. Hence I would like to express my heartfelt gratitude and special thanks to the residents of Meladinagar and Nitinagar who devoted much of their valuable time and even invited me to live with them for some time; particularly Ruthben, Petabhai, Mahendrabhai, Kalubhai, and Amrutbhai who gave me an insight into their life, which turned out to be an extraordinary and unforgettable experience of learning and understanding.

Secondly, during another visit in Ahmedabad a few years later, Mihirbhai Bhatt, Honorary Director of FPI/DMI, presented to me a small book entitled 'Understanding Vulnerability'[1]. Upon reading this book I felt that it touched on a very compelling topic. So I went on to develop my first ideas for a research proposal on the subject of urban risks and marginalised citizens. It is for this reason that I am deeply indebted to Mihir Bhatt and the people of Urban Planning Partnerships (UPP) of FPI and DMI. During my fieldwork almost all the team members of UPP were engaged in some way with my work, through organisational assistance, discussions, translations, and in leisure. Therefore I would like to thank but a few: Mrs Vandana Vyas, Ms Siddhi Dholakia, Ms Bindi Parekh, Mr Jenis Thakkar, Mrs Tejalben Bhatt, Mr Hasmukh Sadhu, Mr Jikesh Thakkar.

[1] Twigg, John and Mihir R. Bhatt (eds.), 1998, Understanding Vulnerability: South Asian Perspectives, Colombo, London: Duryog Nivaran and Intermediate Technology Publications.

My fieldwork in Ahmedabad was enriched by the following individuals: my language teacher Prof Raymond Parmar with whom I spent many hours discussing ethno-linguistic insights of Gujarati language and culture; professionally and privately I am grateful to my friend Yutaka Sato, a Japanese scholar and PhD-candidate, and his wife Myong-jin; Jaydev Nansey, Lars Kahnert who all proved to be good companions in Ahmedabad.

The following institutions and individuals have played a key role in the accomplishment of the thesis and I would like to thank them all: the German Academic Exchange Service (DAAD) is acknowledged for its comprehensive and generous support for my doctoral research over a period of more than three years, in London and the fieldwork in Gujarat; Professor Patrick Wakely, my supervisor at the Development Planning Unit, whose enormous experience and knowledgeable guidance left enough room for me to develop my own thoughts; Nadia Taher, former Director of the PhD programme at the DPU, who taught me the art of constructive criticism; Michael Safier for inspiring discussions; my Gujarati Teacher Rachel Dwyer at SOAS; officials of the Ahmedabad Municipal Corporation, especially the Slum Networking Cell: Mr Nayan Zinzuwadia and Mr Rajesh Patel; my PhD fellows at the DPU for countless discussions and an enjoyable time; Lukas Born for his valuable comments on chapters one and two; Katja Schäfer for cartographical assistance. I am also grateful to Wendy Kasap who proofread the thesis to iron out my 'Germanisms'.

Finally, I would like to thank my family, my parents who have always encouraged me and enabled me to come this far; my wife Nisha, who married me not knowing what it means to become the spouse of a PhD-candidate. She supported me emotionally and was a steady source of inspiration.

I have changed all the names in the case studies for reasons of confidentiality and to protect my respondents. All the views and opinions expressed are solely mine. I take full responsibility for any inaccuracies, mistakes and inappropriateness.

March 2007

Colombo

Table of Contents

PART 2: The Case

PART 3: Conclusion

Detailed Table of Contents

PART 2: The Case

Chapter VII

Chapter VIII

PART 3: Conclusion

List of

Maps, Figures, Boxes, Tables, Photographs

Maps

Figures

Boxes

Tables

Photographs[2]

Exchange Rates

As of March 2007, the Indian currency rupee (INR) was approximately 44.28 against US$1, 85.41 against £1 and 58.21 against €1.

[2] All photographs copyright the author.

List of Acronyms

AI)DMI	(All India) Disaster Mitigation Institute
(G)DCRs	(Gujarat) Development Control Regulations
AEC	Ahmedabad Electricity Corporation
AMC	Ahmedabad Municipal Corporation
AUDA	Ahmedabad Urban Development Authority
CAA	Constitutional Amendment Act
CBO	Community Based Organisation
CDP	City Development Plan
CDS	City Development Strategy
CMAG	City Managers Association Gujarat
FPI	Foundation for Public Interest
GIDC	Gujarat Industrial Development Corporation
GSDMA	Gujarat State Disaster Management Authority
GTZ	German Technical Cooperation
IAS	Indian Administrative Service
MC	Municipal Commissioner
NGO	Non-governmental Organisation
SC	Scheduled Caste
SNP	Slum Networking Programme
SPV	Special Purpose Vehicle
ST	Scheduled Tribe
TLA	Textile Labour Association
ToI	Times of India
UDA	Urban Development Authority
ULB	Urban Local Body
UPP	Urban Planning Partnerships
USAID	United States Agency for International Development

Glossary of Indian Terms

ahimsa	the principle of non-violence
adivasi	tribal population
anganwadi	nursery school, kindergarten
Bania	traditional merchant castes in western India belonging to the *Vaishya varna*
bhajan	spiritual songs
bhakti	unconditional devotion for God (in Gujarat usually *Krishna*) with the aim to attain salvation by becoming one with him; there are however, many sects that propose different philosophies of *bhakti*
bhoot	ghost, spirit
bhuva	medicineman-cum-priest (of a low caste) for low caste people
Brahmin	highest class of the four *varnas* comprising the priests
Chamar	untouchable caste of leather workers, classified by Government of India as Scheduled Caste (SC)
chula	coal stove used for cooking
dahej	dowry
Dalit	contemporary term for untouchables
Divali	festival of lights in October/November to worship Ganesha and Lakshmi
gali	lane
godown	term for a warehouse in India
Harijan	translated as 'Children of God', name given by Gandhi for untouchable castes
imli	tamarind
Jain	a follower of *Jainism*, traditionally business people (*Bania*)
jati	literally 'birth', but then the 'caste' a person is born into, it has real life significance as it regulates marriage, kinship, social standing, etc.; *jati* is usually seen as sub-caste of one of the four *varnas*; thousands of regionally different *jatis* exist in India
kaccha	simple building structure based on mud and clay
kanyadaan	i.e. 'gift of a bride': the ritual during a wedding ceremony in which the bride is given to the groom; this practice occurs usually in combination with the custom of dowry (*dahej*); a custom followed by Meladinagar residents
kanyavikriya	i.e. 'bride-wealth' (also 'bride-price'): the bride's family receives money from the bridegroom's family, a custom followed by Nitinagar residents
Kshatriya	second highest class of the four *varnas* comprising warriors and rulers
kuldevi	protective lineage (family) goddess
laaj	custom of women to veil their face

lok adaalat/darbar	people's court: extra-judicial conflict resolution
ma/mataji	Mother Goddess
Mataji na Nived	means "food of the goddess" or "food presented to the goddess"; a festival during which food, for instance water, milk, flowers, fruits, ghee, and more (Kapoor 2002: 104), is prepared and donated to the mother goddess. For this religious and social occasion all family members come together either at their home or even at their native place (the villages). This festival is celebrated by most people in Gujarat and takes place on the eighth day of *Navratri*, the festival of nine nights devoted to the mother goddess, in October/November. The native village often is the place where families crystallise around their family goddess, the *kuldevi*.
Navratri	festival of nine nights that worships the mother goddess
pacca	more permanent structure made from bricks using concrete and plaster
panwalla	A person (*walla*) who sells *pan*, a betel leaf stuffed with betel nut, coconut, herbs, etc.
Parivartan Yojna	"Programme for Transformation", another name for the Slum Networking Programme
pol	neighbourhood in Ahmedabad's historic city
puja	prayer ceremony
rotla	a type of Indian bread similar but heavier than *chapati*
Sahbhagi Yojna	Partnership Programme
Shudra	lowest class of the four *varnas* comprising the service castes
Svadhyaya	A socio-spiritual movement in Western India founded by Pandurang Shastri Athavale (respectfully called Dadaji), a Marathi Brahmin, some 50 years ago. It focuses in Gujarat especially on fishermen and *Vaghri* communities, but members (*Svadhyayees*) come from all castes. The theistic philosophy is based on the *Bhagavad Gita* which is the foremost exposition of *bhakti* addressed to Krishna. The movement combines spiritual upliftment with human dignity and self-esteem, promotes individual agency and social justice and equity by dismissing the caste system in lectures and through communal work conducted by its members.
talavdi	Tank, pond
Vaghri	'gypsies' of India with extremely low social status, classified by Government of India as Scheduled Caste (SC)
Vaishya	Third class of the four *varnas* comprising merchants, craftsmen and farmers
Vanakar	untouchable caste of weavers, classified by Government of India as Scheduled Caste (SC)
varna	means literally 'colour', but is also translated as 'caste'; according to the ancient Indian theory the four-fold hierarchical strata of society comprising the *Brahmins*, *Kshatriya*, *Vaishya* and *Shudra*

Part 1

Setting the Stage

Chapter I

Introduction

I. Introduction

1.1 The Setting: Urban Risks, the Poor and Risk Communication

Since Ulrich Beck coined the term 'risk society' (1986,1992), the recognition that modern technologies, shifts in social and economic organisation and the growth of urban areas that put 'risks' on the global agenda, has expanded. The increasing awareness of risks is a sign of a number of fundamental transitions in the world. So great is this understanding that it has been labelled 'the imprimatur of our age' (Jaeger at al. 2001). At the same time these macro-level risks have very local realities, effects and implications. Consequently, a very important factor to notice is the diversity of risk conditions and contexts. However, as critics argue (see Caplan 2000), not all countries have reached the status of late modernity described by scholars such as Giddens and Beck, with a self-reflecting society and individuals having the specific characteristics of a new social organisation with its epiphenomenon 'risk'. The question regarding the global relevance of this risk research mainly undertaken in such western countries as the USA and Europe is a critical and recurring issue in the literature.

Nonetheless, during the past 10-15 years the need for action in risk and disaster mitigation has been widely recognised. Rapid urbanisation notably in developing countries and the pandemonium of more than 900 million slum dwellers (UN-Habitat 2003) are reason enough for shifting the focus from rural towards urban areas. Additionally, most of the world's population increase will occur in the urban areas of Africa, Asia, Latin America and the Caribbean, with more than half of the world's population becoming urban by 2007 (UNDP 2004: 58). Programmes and projects on global, regional and local levels as well as

networks of non-governmental activities reinforce this focus. In 1989 a global programme to reduce losses from natural hazards was launched by the United Nations proclaiming the 1990s as the 'International Decade of Natural Disaster Reduction' (Eades, no date). This initiative was stimulated by the belief that risk in many areas is expanding and creating particular problems for the poorest countries. IDNDR highlighted the fact that consequences of hazards are increasingly due to factors such as climate change, the rise of mega-cities and poverty (Smith 2001).

To facilitate the work, the UN decided at its Programme Forum in 1999 a follow-up 'International Strategy for Disaster Reduction' (ISDR), stating: "[...] to continue mobilizing and sustaining global efforts already carried out during the United Nations International Decade for Natural Disaster Reduction (IDNDR) in order to maintain an international platform within the United Nations, to deal with disaster prevention and vulnerability reduction, in particular within developing countries most at threat from natural hazards and with insufficient financial resources to face natural disasters and mitigate their impact" (UN 1999). Whilst these endeavours certainly developed new networks and insights, they are limited in at least two respects.

Firstly, they focus primarily on so-called natural disaster risks, and less on everyday and slowly accumulating risks. Yet everyday risks are often regarded as human-induced and relevant in the urban context and development. Secondly, the risk management strategies concentrate mainly on top-down scientific and technological solutions and strategies. Even though the involvement of 'the public' is recommended, no further expression is given regarding communication, either ignoring this aspect completely or seeing it as a task for non-governmental organisations. A similar approach may be observed in projects at a city level.

This situation accounts for the difficulty, apart from some training and networking activities, in obtaining useful information from the materials provided by UNCHS's

'Risk and Disaster Mitigation Unit' on participation and risk communication, where a debate on risks is offered. Predominantly there is the techno-scientific notion of risk and disaster management propagating physical planning for recovery of settlements and the relief for people after a strike[1]. To acquire a complementary perspective, it is necessary to look at UNDP publications, which appear to link poverty, risks and vulnerability on a more community based level (UNDP no date). The sustainable livelihoods approach is a step in this direction towards a better integrated risk management in development processes. Such a notion allows for an improved and more appropriate dealing with the circumstances, since social factors and not merely place-specific environmental factors, can be considered to change the existing living conditions of the poor. However, it is only recently that the UNDP began to propagate a multi-hazard risk model which clearly takes an integrated approach on development and risk reduction (UNDP 2004). For most development agencies, this is a comparatively new area of practice (GTZ 2002).

Hazards in cities are multiple. Cities as points of intense human activity have always been subject to risks, many of them human-induced. Three complex aspects have to be considered in search of the 'urban' in urban risks:

1. Highly visible is the fact that rapid urbanisation accounts for fast population growth, high density, proliferation of squatter and slum settlements with no sanitation, uncontrolled building construction, and the development of industrial estates with potentially hazardous effects, especially when in close proximity to residential areas.
2. Social and economic change - e.g. the emergence of multi-ethnic cities as well as liberalisation of the economic sector exacerbates the fragmentation, polarisation and communalisation of urban societies.

[1] See the website www.unhabitat.org/rdmu/level2files/aboutdmp.html, accessed 18/05/02.

3. Finally, natural events, earthquakes, storms, floods, and the like further add to the spectrum of risks in cities.

As noted in several publications (IDNDR 1996, International Federation of Red Cross and Red Crescent Societies 1998, UNDP 2004), what classifies risks as 'urban' is the dimension and complexity of urban settlements, namely an extreme concentration of a population together with different types of human activities.

As IDNDR (1996:2) highlighted, a greater number of people are settling in areas vulnerable to hazards. The rapid population growth and migration make it difficult for authorities to protect people from disasters. Urbanisation is also upsetting the balance in ecosystems, which contributes to higher disaster risks. On the one hand, there are acute risk events that are large-scale and short-term, for instance earthquakes, landslides and floods. While on the other hand, 'slow-motion' threats increasingly exhibit chronic risk processes that are smaller-scale and longer term from pollution, crime and poverty (Oelofse 2002). This combination suggests, cities are an extremely complex human creation and as such at great risk both from a wide range of hazards and from their own multiple vulnerability (Moor 2002). Responding to this, the International Federation of Red Cross and Red Crescent Societies in its World Disasters Report 1999 refers for the first time to 'urban risks and disasters' as an issue in its own right. Three main reasons are identified as to why many cities contain disaster-prone sites:

1. Cities founded on risky sites because advantages outweighed risks, e.g. rivers provide fresh water and fertile soil, but are flood-prone.
2. The construction of any city involves massive modifications of natural sites, but usually without a disaster prevention culture that minimises hazards.
3. Cities outgrew what were originally relatively safe sites. Initially, there was no requirement for urban development over hazardous sites, but nowadays the population can no longer be accommodated in safe areas, or all the safe, well located sites have become too expensive for low-income groups.

As a consequence, there is a combination of specific risks in urban areas which emerge because of the ongoing process of urbanisation. The connection between development, environmental degradation and disaster risks has been explicitly highlighted in developing countries by the UN International Strategy for Disaster Reduction (UN-ISDR n/d). The severity and magnitude of such events have had disastrous effects, particularly for the urban poor. Hence what concerns poor people most, in cities, are not disaster risks occurring at one point in time, but permanent risks in everyday life arising from manifold causes. This is the focus of this research and the case studies underline this significance. The steady accumulation of such risks gives rise to disasters since "[...] disasters come in different sizes and over long time periods. For millions of poor urban dwellers, managing disaster is an everyday occurrence, less noticed by outsiders but just as insidious. [...] Such less noticeable disasters erode livelihoods and cost lives" (Sanderson 2000: 95). Applying this viewpoint, the term disaster becomes more relevant for this study as it broadens the traditional definition and also reflects on the long-term development issues.

The spatial aspect of risks or the 'geography of risks' becomes increasingly evident too (Pelling 2002). Urban disasters are selective in whom they strike hardest, and the poor are usually the most vulnerable. The spatial dimension of vulnerability becomes evident for the poorest people who have little choice but to locate in unsafe settings. Regarding loss of life and the relative economic impact, the consequences of disasters hit hardest where poverty-stricken people are concentrated. Broad and complex socio-economic problems combine with insecure physical environments to create a high degree of vulnerability. This correlation of poverty with environmental and health risks in urban areas has been highlighted by many authors (McGranahan et al. 2001, Hardoy et al. 2001). Apparently, there are often chain reactions, resulting in a difficulty in separating cause and effect, and different types of risk from each other.

Lack of resources when it comes to natural (e.g. land, water), social and political (e.g. family, social networks), human (e.g. knowledge, skills) and physical assets (e.g. roads, clinics) increases the vulnerability of poor communities.[2] When there are only a few resources left, people have insufficient time to recover, and poorer groups frequently receive less post-disaster assistance. Also, by relocating them, the destruction of social networks and/or loss of jobs cause further hardship for poorer people. Unsurprisingly, vulnerability adds to the conceptualisation of poverty and extends the understanding of the process by which people become and remain poor (Chambers 1989). In view of this, multiple dimensions of urban poverty overlap with the concept of livelihood risk assessment especially in terms of the security deficits of the urban poor population. This comprises of income, employment, personal, and natural risks as well as informal and formal insurance systems (GTZ 2003). Assets such as human investment in health and education, productive assets such as houses and domestic equipment, or access to community infrastructure, patrons and the government for resources in times of need are seen to be closely linked to the concept of poverty (Wratten 1995). By virtue of this statement these assets must be viewed as the crucial means in times of need. They determine how fast and in which way households recover from disasters or can manage everyday risks.

As the discussion illustrates, not all people are equally affected or at risk. Naturally, even within low-income groups there exists a distribution of risks defined along characteristics such as gender, sex, age and social standing. Moreover, there are other factors cross-cutting the above mentioned illuminating that "[o]nce one begins to examine who is most affected by environmental hazards, the interaction between environmental hazards and social, economic, political and demographic factors becomes much clearer. [...] Virtually all environmental health problems in urban areas have a social, economic or political

[2] Assets as defined in the 'sustainable livelihoods' approach by UNDP, www.undp.org/sl/Overview/assets.htm, accessed 18/05/02.

underpinning in that it is these factors that determine who is most at risk and who cannot obtain the required treatment and support, when illness or injury occurs" (Hardoy et al. 2001: 157). In other words, risks and disasters are socially construed. Therefore disastrous events should be more properly termed 'social' or 'political' disasters (Dove .and Castleforte 2001). If this is accepted, we can begin to think of appropriate avenues of intervention, through planning, in order to alleviate those constructed social, cultural, political and economic structures at the very basis of society.

1.2 The Argument for Risk Communication in Urban Development

In India, rapid urban growth causes poor communities to settle in highly congested urban areas. An increasing number of these areas are at risk from the high potential of everyday risks, i.e. environmental (air pollution, industry, etc.), natural (floods, earthquakes, etc.), health (epidemics, diseases, etc.), social (gender, caste, violence, etc.) or occupational (informality, illegality, etc.). Consequently poor communities themselves have to cope with their vulnerability and a multiplicity of various risks in their daily life. As discussed, urbanisation and risk are two linked phenomena that become even more critical in combination with poverty. To date, the understanding of urban risks and the vulnerability of inhabitants is an underrepresented subject in urban planning. In the field of urban planning, risk management to mitigate urban risks for the poor has not been included properly. Moreover, there are still insufficient tools available, particularly with respect to participatory planning methods. However, the incorporation of the poor urban communities' view in urban development planning can contribute to a more equal communication between diverse agents involved in the planning processes.

With respect to what poor people, municipal authorities and other actors perceive as risks, different ways of reasoning and rationalisation produce diverse risk-compensating activities or risk-taking respectively. Accordingly, strategies to cope with risk situations represent different values, knowledge and understanding of risk phenomena. Therefore this thesis argues, in order to meet the interests and needs of relevant agents in the context of risk (especially poor communities' perspectives), it is necessary to investigate the function and role of communicative mechanisms at the interface of community, NGO and governmental action.

Communication is a crucial element for all planning processes. As stated above, there exists a conjuncture of risk mitigation and urban development that emphasises the need for an integrated risk management in urban planning processes. The argument here calls for mainstreaming urban risks through risk communication. It is not post-disaster relief but pre-disaster preparedness, as risk mitigation in everyday life, aiming at sustainable development of underprivileged communities. Unfortunately, most urban authorities in developing countries fail or have difficulties in dealing with these new challenges.

The intrinsic necessity of communicating risks in society and for urban planning in particular becomes evident when we look at the nature of the concept of risk, notably its multi-dimensionality. Contrary to statements postulated mainly in technical approaches to 'risk,' it is not simply comprised of a probability of an adverse future event. Far more important is to notice the perception of risk as being socially and culturally constructed. What is a risk and what is not, is essentially influenced by the way a society gives meaning to the world through its values, beliefs, norms, worldviews and so forth. Perspectives certainly vary within and among institutions like municipalities, industries or different communities in a city. Accordingly, they must be negotiated, mediated and communicated to come to terms with arising conflicts and in resolving them.

If we take the multidimensionality and the perceptual element of risk as given facts, the communication of the concept between different actors becomes a central point in risk analysis and management during the planning process. Although there are activities concerning risk and disaster mitigation in cities, there is still a strong tendency towards top-down planning processes involving capital intensive assessment and monitoring technologies on governmental or city level (Blaikie et al. 1994). This study, on the contrary, fosters a community approach, not to argue against these technical measures, but to opt for a complementary approach that takes the knowledge of all actors into account equally.

1.3 Overview of Theoretical Approach and Methodology

Following the above mentioned argument, this study employs an *anthropological perspective,* which is based on an overall approach of *communicative urban development planning.*

An anthropological perspective includes:

- the intention to investigate and analyse the living conditions and perceptions of affected urban residents in terms of their risks. A focus on examining the subjective understanding of risk, related processes and relations within and between communities on one side and the municipality on the other.
- an evaluation of social and cultural networks, the key actors (administrative officers, communities, NGOs) and their differing understandings of risk and vulnerability, as well as the local knowledge of communities to offer alternative perspectives for participatory planning.

The communicative urban development planning approach comprises:

- communication as a crucial element for all planning processes.
- the involvement of various actors in urban planning processes with diverse interests and positions, power and financial resources. These circumstances

contribute to a specific existing 'culture of communication', which is not collaborative but in most cases distorted in terms of asymmetrical relationships.

- the ideal of developing through mutual learning and understanding ways of collaborating that attempt to elaborate solutions by negotiation and consensual conflict management.

In order to limit the research, it focuses on the roles in communication played by slum communities, the city government, and NGOs. To investigate risk in the light of communication, the following theoretical approaches have been utilised:

- a socio-cultural approach on the concept of risk adopting anthropological theorising (cultural theory of Mary Douglas and colleagues) and sociological theorising (Beck, Giddens and others);
- the abstract conceptual ideas of 'communicative reasoning' (Habermas), hermeneutic-interpretative approaches to knowledge and understanding in society/across cultures (Denzin, Geertz, Giddens and others) and
- the practice oriented collaborative-communicative planning approach (Healey, Forester and others).

Every research project requires suitable research methods and techniques. In agreement with the objectives of the research, the qualitative research paradigm is considered to be appropriate, because it corresponds well with the conceptual framework. The core of primary data collection was conducted during fieldwork in Ahmedabad, the former capital of the Gujarat State in Western India (see Appendix 1). It was selected as the case study based on the rationale of the following characteristics. With 4.5 million inhabitants, the city is the 7th largest in India. Approximately 40 percent of the population lives in under-serviced slums and seriously deteriorating industrial labourer estates. The city has repeatedly and recently been visited by a number of natural and human calamities such as earthquakes, floods and communal riots.

Empirical data are framed by additional published and unpublished material from various sources in India and Gujarat. Primarily, the qualitative research paradigm suits best the intended objectives of this study. Since this is a constructionist and phenomenological approach to investigate views of risk and an examination of communicative relationships between distinct agents, criteria for analysing perceptions of risks, the cultural and social frameworks as well as processes of communication and interaction are at the centre of the investigation outlined here. Equally, by virtue of the emphasis on the experience of risk and communication especially of the slum dwellers, a style of anthropological writing has been adopted that best reflects the intensity of individual and collective experiences, so demonstrating its depth, meaning and the context of events. In such a way it assists the reader to immerse into the flow of events and stay close to the protagonists in order to increase the understanding of the complexities and intricacies of local circumstances.

1.4 Research Hypothesis, Aim and Objectives

From the above argumentation, we can now state that:

1. slum dwellers, municipal authorities and other actors perceive risks in different ways;
2. this produces context-dependent approaches to risk-taking and response;
3. devising strategies to cope with risk situations represent different values, knowledge and understanding.

These assumptions form the platform on which the research is based and lead to the hypothesis posed for this study:

> In India, risk communication is rarely acknowledged in slum improvement. The lack of knowledge and sustainable and participatory methods and tools, which recognise the diversity of local perceptions and notions of risk, constrain effective action for its mitigation.

In the first part, the hypothesis utilises the major concepts that define its scope, notably 'risk communication' and 'slum improvement'. The second part of the hypothesis incorporates those keywords which define the framework for investigation, i.e. 'lack of knowledge', 'sustainable and participatory tools', 'recognition of diversity', and 'risk mitigation'. As a working definition:

> 'Risk' may be understood as the calculation of probable adverse events, which is based on available, though imperfect knowledge and framed by norms and values that condition the social construction of risks of a specific society.

In consistency with this perspective of 'risk':

> 'Communication' may be understood as a cultural practice in terms of the social construction of meaning and interaction. It is transactional in character comprising a co-operative, coordinative and negotiative behaviour among two or more groups or people, including a process of learning by all actors so as to create understanding, i.e. a common reality (to identify and tackle risks).

The following two chapters elaborate on the detailed arguments on which the hypothesis and the working definitions rest. On one hand, the literature review in Chapter II demonstrates shifts in the epistemological understanding of 'risk' which pinpoints changing premises of the predominant contemporary risk management practices. On the other, Chapter III develops a conceptual framework based on a notion of urban governance, which allows multi-stakeholder involvement and flexibility in the redefinition of urban development policies so as to mainstream new issues such as risk reduction and communication.

The **research aim** of this study is to achieve an understanding of the communication processes of urban risks, in urban development planning, with a particular view on the complexity of risks as perceived by slum dwellers. However, by virtue of the intricacy of the phenomenon and the notion of communication, the ontological and epistemological nature of urban risks as perceived by different parties must be taken into consideration as well. This viewpoint is mirrored in six **research objectives**:

- To understand poor communities' perspectives and experience on urban risks;
- To examine knowledge and rationality in poor communities' coping mechanisms;
- To understand the position and attitude of the municipality in terms of urban risks and governance;
- To describe and understand communication processes, the means, channels, mechanisms and contents employed by different agents;
- To understand mismatches between different stakeholders and the reasons for them;
- To develop criteria that are useful to describe what is essential for 'good', 'symmetrical' and/or 'effective' communication.

1.5 Structure and Guide of the Study

The thesis is divided in three parts. Part one comprises four Chapters introducing the topic with the research hypothesis and objectives (Chapter I), the literature review (Chapter II), conceptual framework (Chapter III) and the methodology (Chapter IV). The following part, containing Chapters V to VIII, is dedicated to the case study and empirical findings. A final part contains with Chapter IX the conclusion of the study.

Chapter II and III concentrate on the theoretical foundation and conceptual framework for this study. Consequently, Chapter II goes to the first conceptual core, the issue of 'risk'. The vantage point is an overview of the lines of debates on risk with a focus on the social sciences. After a brief outline of the origin of the concept in western thought, a general overview of the diversity of theories in risk research is given. This allows the reader to understand why ultimately a socio-cultural conceptualisation is favoured for this research. Crucial in

reviewing risk theories in social and cultural studies is the development of a genuine and original conceptualisation of 'risk' for the thesis in Chapter III.

A subsequent section in Chapter II reviewing risk communication forms the second core in moulding the conceptual framework. Managing risks is a complex and socially far-reaching task. So how this management is organised becomes a central issue, which has implications for entire populations. Evidently, each type of risk management is inter-linked with risk analysis, i.e. the way risks are defined and selected. As illustrated before, different theoretical approaches to risk provide actors with a set of ideas on how to manage risks. Ultimately, it is argued that sociological and anthropological perspectives of risk can serve as a framework for risk communication, so improving the climate of risk decisions and acceptance, and simultaneously supplementing quantitative statistical data.

These socio-cultural theories, which form the main body of the research in terms of analysing risks, equally enable an inclusion of communicative processes and determine the methodology. For this reason, the main task is to situate risk communication in an urban environment by way of examining communication theories, collaborative planning and especially risk communication in order to complement the analytical framework. The synthesis of theoretical approaches of risk perception and communicative theories in Chapter III shapes a conceptual framework that enables the promotion of a novel perspective and an alternative approach to the analysis of inclusive risk communication in urban governance.

Chapter IV begins with a section on the methodological framework and ethical implications in order to clarify the overall approach to the thesis and the fieldwork. The research design is inspired by action research. In agreement with the critique outlined in the theoretical chapter, action research corresponds to a worldview and as a methodological approach with the ethos of risk communication. The approach to the methodology is also reflected in the style of (re-)presenting the findings, i.e. the style of writing, which is characterised less

by technical terminology than by the use of personal examples, narratives and story telling, thus revealing more on how the fieldwork actually transpired. Subsequent sections of the chapter are dedicated to methodical issues of sampling in qualitative research, the selection of cases, the manner in which the interviews and participatory workshops were prepared and conducted, and finally the personal fieldwork experience seen as a relationship between 'researcher' and 'researched'. The chapter is concluded with a discussion about data processing and an account of the actual analysis and interpretation of the collected material.

The first part of Chapter V focuses briefly on the background of risk management in India and Gujarat with special reference to the integration of development, urban risks and local governance by taking into account the current institutional arrangements of disaster risk management. The city of Ahmedabad is introduced in the second part of Chapter V focusing on aspects of its history, society, culture and economy in relation to urban risks. The introduction to the case study city provides the reader with a macro perspective of the contextual circumstances in Ahmedabad, for many city-wide problems are mirrored locally. Ahmedabad has to manage environmental degradation, natural disasters, economic stress and social tension. Urban risks and vulnerability in the city must be viewed as a result of rapid growth and the ongoing process of transformation regarding the mode of urban governance and the dynamics of globalisation.

The following Chapters VI to VIII comprise the findings and analysis of the data collected during the fieldwork. Central to the discussion is the communication of risks as perceived by slum dwellers and the Municipal Corporation of Ahmedabad. Generally, most publications on urban governance, partnership and participation do not consider an in-depth examination of communicative procedures. In the light of this, slum improvement is linked with urban governance and communication for a better understanding of how underprivileged citizens are able or not able to communicate their concerns.

Chapter VI focuses on the analysis of risk conditions in the two slum locations from a holistic approach trying to grasp the interdependencies and relationships between risk spheres, as perceived by the residents. Despite many similarities, the findings indicate fundamental differences which are illustrated in the concluding section of the Chapter. This section deals with the objective to outline a profile of risk conditions in the context of the respective locality, its residents, and the social and cultural setting to understand the perspectives and experiences of slum dwellers in urban risk situations.

The subsequent Chapter VII takes the reader through the local government to examine its functioning in terms of its approach to local governance with a focus on the inclusion of weaker sections of the society. The emphasis on the Slum-Networking Programme (SNP) - reflecting activities in urban governance - lies in the assumption that it is potentially related to urban risk management and is a vehicle to facilitate communication. This focus was selected since the attitude and institutional structure of the Municipal Corporation are fundamental in the approach and notion of communication. Following this, the notion of urban risks and disasters is analysed in the context of the structure and functioning of the AMC, past and current initiatives, and the scope for mainstreaming this topic.

Chapter VIII synthesises findings of the previous chapters along the conceptual approach of urban risks and their communication. It has two objectives. The first one focuses on the description and understanding of communication processes including an investigation of the mechanisms of communication at work among and between the slum dwellers, the Municipal Corporation and the intermediate NGOs. The institutional environment of communication in the selected slums is analysed in detail vis-à-vis an examination of the communicative competences of the Municipal Corporation and initiatives of NGOs, which support innovation and mediation between the urban authorities and the slum communities. Another objective concentrates on the mis-matches that occur between the stakeholders

and the causes for disruptions. This allows an understanding of the complexity of communicative actions, and ultimately hints towards opportunities for improving the effectiveness of communication. According to the conceptual understanding of communication, the procedural character of communication is emphasised by focusing on the transformation of institutions and changes in partnership relations.

In the concluding part, Chapter IX provides an analytical summary of the key findings of the research as a response to the hypothesis. It demonstrates the relevance of the conceptual approach and its application in the context of studying urban risk communication in urban governance. In doing so, it emphasises the strengths of defining 'communication' as a human interaction and 'risk' as a socio-cultural phenomenon which necessitates an in-depth analysis of local conditions and contexts taking into account a holistic perspective. It is furthermore pointed out that the findings have significant implications for policy making in the area of integrated urban development planning and participatory local governance.

Chapter II

Towards a Conceptual Framework for Urban Risk Communication

"Technical analyses assume a mirror relationship between observation and reality and do not consider that causes of harm and the magnitude of consequences are both mediated through social experience and interaction" (Renn 1992: 61)

II. Towards a Conceptual Framework for Urban Risk Communication

2.1 Introduction

This chapter looks at the theoretical foundation and framework of the study through an introduction to relevant concepts. While I start with a brief outline of the historical background of 'risk' and related concepts, I shall continue to explore the wide area of risk research. This is an inevitable first step as the understanding of the way in which the concept of risk is viewed is a prerequisite for the notion of communication. The vantage point is an overview of the lines of debates on risk, with an emphasis on the social sciences, in order to identify major currents in socio-cultural debates on risk. This section provides one theoretical core of the research with important implications for the development of the conceptual framework.

The subsequent section on communication discusses the evolution of risk communication and its conventional approach including a critique. This leads to a revision of what communication processes are about and how they function. A closer examination is devoted to specific theories of communication research and the theory of communicative action, which guides the discussion closer towards planning processes. Consequently, I shall investigate how communicative processes, which are essential for any kind of planning, have been received and looked at with regard to planning theory, particularly after the 'argumentative turn'. Here, a brief critique of the current communicative planning theory and its predecessors are given as a justification for the chosen approach. This section builds on the insights of socio-cultural risk theories discussed before. It comprises

the second major theoretical complex and synthesises different theories with anthropological and planning background to tighten the analytical framework for urban risk communication. It results in a convergence of theories from two diverse theoretical bodies, the socio-cultural theories on risk, and theories on communication and communicative planning.

Several authors share the point of view that risks and vulnerability can be reduced by competent and effective urban authorities (Amis 1995, Hardoy et al. 2001, World Disasters Report 1999, World Bank 2000). They see, particularly in good governance structures, a key to solutions through good practice in environmental policy and disaster management: "Disaster prevention can also be hindered by 'undemocratic' local communities, which lack the communication processes available in open, democratic societies. [...] Generally city dwellers have a greater capacity to pay for help if costs are controlled and the risks well communicated. Community-driven solutions may be possible even if local or national authorities are indifferent or weak" (World Disasters Report 1999: 10). The report continues to emphasise communicative strategies, arguing that city authorities could act to ensure effective communication with local people, "[f]or cities, the single most important hazard reduction factor should be an authority making the best possible use of local knowledge and resources to reduce risks" (World Disasters Report 1999: 17). Despite these positive statements, nothing is mentioned about the quality of this proposed communication.

Nevertheless, these statements on the relationship of good urban governance and the management of risks through the medium of risk communication can be taken as the starting point for the research. As the review of the literature demonstrates, this is still a rather unknown field of research and practice, especially in developing countries. What is remarkable too, is the fact that there are detailed discussions regarding the concepts 'disaster' and 'vulnerability' in

development, but 'risk' (even if used in titles[3]) seems to be presupposed. Consequently most of the international publications hardly conceptualise this aspect. Apparently, there is a need for more explicitness, precision and clarification of risk conceptualisations. Such a move has been recognised theoretically by Adam et al., who stress that they advocate a social theory which has implications "to transform 'the language of risk' from the ethos of calculation (and binary logic) to the ethos of mediation" (2000: 2). This quote indicates a shift in the notion of risk in theory and public debate that can be observed over the past decades. It reverses the earlier conventional question of whether there is a necessity for deliberate public negotiation regarding risks, whether they are viewed as 'real', 'objective' facts. Given this attitude, there would be no need for discourse and negotiation, since the premise is 'everyone agrees upon it'.

According to this notion, risk communication is viewed as a public relations model. This technical view of risk communication encompasses a one-way, expert-to-lay public information flow, based on the premise that 'the public' needs 'accurate' information and scientific expertise. Public failure to agree with the information is usually attributed to a misunderstanding of risk issues that should be persuaded 'away' (i.e. to change people's minds and eventually their behaviour). As a classical example of the rational actor paradigm, recipients of the risk message are assumed to be individuals who form their own judgements and attitudes according to the message. The fact that people are embedded in social networks and may not think of risks in the same way as experts do is largely ignored (Gutteling and Wiegman 1996, Tulloch 1999, Jaeger et al. 2001).

Problems of this mode of communication are now better recognised. First of all, the type and quality of messages may be problematic for the public to process

[3] See for instance the publications by McGranahan et al. 2001, the UNCHS and UNDP publications in the bibliography. A positive example is the World Bank Report 2000/2001 which discusses the difficulties in defining and conceptualising risks.

because of its complexity. In addition, the so called 'public' may have different informational needs to arrive at a more adequate risk judgement, or specific wishes regarding the fairness of procedures to arrive at such a judgement: "Risk professionals often argue that risk communication in the public relations model is well intentioned, that they wish only to reduce the overall risk to society, but this model of risk communication does not admit that ends can be rationally discussed; that is the goal of reduced human harm is simply taken for granted. The traditional model of risk communication reaches its maximum when a more thorough debate is required" (Jaeger et al. 2001: 135).

It is interesting to note the parallelism that emerges with a similar paradigm in early planning theory of those experts who 'do good' in the name of 'the public interest' without recognising its diversity and the paternalistic character of this planning notion (Faludi 1973). This approach could be called a conventional risk communication procedure, since it merely extends the traditional logic of scientific thought to the public, which is supposed to align with the same rationality. Consequently, much of the literature about risk communication is almost exclusively concerned with 'developed' countries, especially Europe and the USA. The debates are still dominated by psychologists who make no reference to 'developing' countries.

In recent years, the scientific perspective and its rationality has been challenged due to a change of understanding and attitude towards science, experts and lay knowledge by social and anthropological research, and in public debate respectively (e.g. Forsyth 2003, Stehr 2001). Suddenly, we are confronted with a diversity of agents and perceptions of risks, and immediately we must ask for negotiation from a variety of risk perspectives to arrive at an agreed understanding of 'risk' and define risk priorities in a specific context.

Why is this so? Risks are now regarded and accepted by many scholars as being perceptual and scientific technical knowledge is not the only consideration.

Thus the question of how to communicate risks becomes inevitable, even more so in the poorer sections in societies which may lack certain assets and resources. Communication in this sense must then be seen as a genuine two-way process, embedded in social and cultural contexts, and aiming at more equal relationships of all participants in the risk discourse. Anthropological studies in the 1980s, in particular, contributed to such a view of perceiving risk not only in terms of individual parameters from a psychometric perspective but from the viewpoint of a collective. From this point of view, risk communication emphasises the creation of shared meaning and trust over the transfer of quantitative information (Rayner 1992, O'Riordan 1995).

Placed in the context of urban planning and planning theory, these developments show interesting parallels in the evolution and development of rationalities, which underpin different epistemologies of risk and risk communication. Moreover, it offers appealing options for the development of these approaches further in an integrated manner with respect to urban development and risk management. Naturally, planning theory has also passed through various phases and 'arrived' at a point in the 1990s where interpretative and communicative rationality question and challenge exactly the same scientific rationality as is prevalent in theorising 'risk'. We therefore move within all these theories in a constant, contextual framework. These theories share many common perspectives. I believe it is worth forging them together in order to create a conceptual framework for a more appropriate communication concerning risks in urban planning processes.

Finally, at its very basic foundation, there is a constant line of argument that runs through all the theories dealt with in this chapter, be they cultural theory, social theories of risk, critical theory or planning theory in its collaborative form, they all are concerned with a critique on the still dominant mono-dimensional 'scientific rationality' of an independently acting *homo oeconomicus*, the rational actor paradigm. A significant aspect in cognitive perspectives of risk is their

foundation on a theory of rational behaviour, the notion of the ideal rational investigator and risk-perceiving agent who assesses probability, thus representing human action as volitional and rational, invariably categorising risk avoidance as rational and risk-taking as irrational (Douglas 1985: 21). This epistemological statement of the 'rational actor paradigm', the individual constructed as calculating and emotion-free actor, assuming that they all share the responses and preferences of the actor in utilitarian philosophy, is today still very much with us, despite more insightful research that could add to it (Jaeger et al. 2001).

2.2 Risk: Debates, Theories, Concepts

2.2.1 Risk: A brief History and the Development Context

2.2.1.1 Risk: A Western Concept

The Latin word *riscum* or the French *risque* were in use in Germany and France in the sixteenth century, while it appeared in English in the second half of the seventeenth century (Giddens 1991). Often the emergence of the word and concept of risk is linked to maritime ventures in the pre-modern period. In the Middle-ages risk was perceived as a natural concept, a God-induced danger that excluded human responsibility and referred to predestination. Following the emergence of modernity in the 17th century this notion of risk changed and was extended to incorporate the notion of conduct and relationships of human beings. Gradually, rational thinking, enlightenment, and objective knowledge of the world through scientific exploration became significant for the 'modernist technical' notion of risk. "The modernist concept of risk represented a new way of viewing the world and its chaotic manifestations, its contingencies and uncertainties. It assumed that unanticipated outcomes may be the consequences of human action rather than 'expressing the hidden meanings of nature or ineffable intentions of the Deity', largely replacing earlier concepts of fate or *fortuna*" (Lupton 1999a: 6-

7). Importantly, modernist notions included also the idea of risk as being potentially good as well as bad. 'Risk' was a neutral concept concerned with probabilities, both with losses and gains. An activity that was associated with high risk simply meant that there was great potential for significant loss or reward (Douglas 1992, Fox 1999).

While this notion dominated until the beginning of the nineteenth century, by the end of the twentieth century risk generally relates to negative or undesirable outcomes, "the word risk means danger, and high risk is a lot of danger" (Douglas 1992). Fox also observes this shift in the meaning of risk: "[...] risk has been co-opted as a term reserved for a negative or undesirable outcome, and as such, is synonymous with the terms danger or hazard" (1999:12). Lupton (1999a) remarks 'risk' is a very loose term in everyday usage, referring almost exclusively to a threat, hazard, danger or harm, and used more weakly for negative rather than disastrous events, with just an unfortunate or annoying consequence. Hence in everyday language risk and uncertainty are treated synonymously (Adams 1995, Lupton 1999a), with risk having become somewhat of an antonym of opportunity.

Many authors like Beck (1986/1992), Giddens (1991), Douglas (1992) or Lash et al. (1996) argue, the contemporary obsession with the concept of risk has roots in the changes inherent in the transformation from pre-modern to modern and finally to late modern societies. Apparently the concept of risk is essentially rooted in Western thought and has direct implications for this study which is principally set in a non-Western culture. For example, Douglas (1992: 39-40) notes, since the Japanese language does not have a word for 'risk', connotations of assessing it merely by way of probability statistics are lacking. Instead, in Japan notions exist which are able to grasp the concept in a more holistic way. Consequently, the conceptualisation of risk must be more inclusive not only to

allow a cross-cultural perspective but also a more comprehensive understanding of risk in Western societies.[4]

The concept of 'risk' cannot be understood without considering related concepts. The concepts of hazard, vulnerability, disaster, and danger, equally serve to contextualise, contrast and define 'risk' more succinctly. I shall discuss the issues of risk along the criteria of poverty and development. Similarly like risk, poverty as a concept is an issue of controversial debate in development studies and practice. Some decades ago it was measured by the World Bank through a simplified definition referring to an income below a minimal standard or a consumption-based poverty line. Its limitations regarding cross-society comparison have been increasingly contested by alternative conceptualisations that refer to the multidimensionality of the concept. In particular, social and anthropological studies took into account the relative aspect of poverty in specific socio-cultural contexts viewing poverty as a failure of capabilities, lack of assets, vulnerability of people and giving great value to non-material assets like independence, security, and self-respect (Chhatrapati and Sato 2004; Crow 1995: 28; Wratten 1995; Susser 2001: 373).

2.2.1.2 Risk and Hazard

Fox (1999) discusses the ontological relation between 'risk' and 'hazard' in greater detail and identifies three distinct positions. The first position, called materialist or realist, describes risk as mapping directly on to an underlying hazard. The second viewpoint, called culturalist or constructionist, views 'hazards' as natural and neutral, whereas 'risks' represent the cultural and the value-laden judgements of human beings about these hazards. The post-modern and third position is the most radical as it moves beyond the culturalist model. This

[4] That is an essential requirement, because the 'risk culture' of people in a specific non-Western country is likely to differ in its premises. If the 'export' of knowledge, that is 'risk management', to these countries does not consider this aspect, there will surely arise problems for instance in accepting measures proposed by implementing authorities.

viewpoint argues that hazards are themselves socially constructed, "[c]reated from the contingent judgements about the adverse or undesirable outcomes of choices made by human beings" (Fox 1999: 19). More precisely, an object or event transforms into one possessing hazardous characteristics only as a result of our evaluations of 'risk', i.e. a hazard comes into existence only by the analysis of the risk. This position is by far the most radical postulating that there exist no real hazards and everything is constructed. In fact, it inverts the relationship between 'risk' and 'hazard' as maintained in the realist perspective by saying that the latter one is not a prior condition to 'risk'. As a result of such intricacy, in the literature on (disaster) risk management and assessment both the two last epistemologies are literally absent, as they are very difficult to translate into practice.[5]

2.2.1.3 Risk and Disaster

The 'dominant perspective' treats disasters as abnormal separate events disturbing the normal path of development. The World Disasters Report 1999, for example, defines disasters as outstanding events "[...] which suddenly kill or injure large numbers of people or cause major economic losses" (International Federation of Red Cross and Red Crescent Societies, 1998: 12). Critics argue that this model arises from the perception of better-off people rather than the poor. Wealthy and affluent people tend to see disaster as an extraordinary exception, separate from other life-events (Vaux 2002: 3). The result of this attitude is that practical interventions tend to take place after disasters have occurred. They are frequently top-down and inflexible in their method, with weak links at grass-roots level and little involvement of disaster victims in decision making or implementation. This is often accompanied by some form of technical equation that explains disaster risks in relation to hazard and vulnerability (Blaikie et al. 1994, GTZ 2002, Twigg 1998).

[5] Fox refers mainly to health and illness in his case study (Fox 1999: 21-22 and FN2, 31).

An 'alternative perspective' sees disasters and conflicts as part of the development of societies. They are unresolved problems arising from the processes of development. Moreover, poor people perceive disaster as an integral part of their life that is closely connected to their livelihood (Vaux 2002: 3). "From this standpoint it becomes clear that there is a link between disasters and the nature of society. Relationships and structures within society determine why certain groups of people are more vulnerable to disasters than others" (Twigg 1998: 3). This is known as the social determination approach to disasters, rather than an emphasis on their natural causes. This perspective is gaining more weight in debates on disaster risks.

2.2.1.4 Risk and Vulnerability

Poor people live with a constant sense of vulnerability, as they permanently face day-by-day disasters. As early as 1989 Robert Chambers observed vulnerability is not synonymous with poverty. It rather means defencelessness, insecurity, and exposure to risk and shocks than lack or want. Chambers (1989: 1) contends, "[v]ulnerability here refers to exposure to contingencies and stress, and difficulty in coping with them. Vulnerability has thus two sides: an external side of risks, shocks, and stress to which an individual or household is subject; and an internal side which is defencelessness, meaning a lack of means (resources) to cope without damaging loss".

Lately there has been further effort to grasp the complexity of urban vulnerability by incorporating multi-dimensional aspects of development like powerlessness or concerns with risk in order to overcome and broaden the traditionally static understanding of poverty. Recognising that despite the potential of urban areas to contribute to improved well-being, the capacity of urban residents to exploit this potential is often limited on account of persistent discrimination that persists in urban policies and practices. In one framework (Coetzee 2002) livelihood systems,

community networks, household and community assets are viewed as the micro-level concepts which may decrease vulnerability and increase resilience.

Finally, vulnerability may be defined as the relative lack of defence or security when faced with a hazard, shock or stress. Since everyone exposed to risks is potentially vulnerable in terms of adverse consequences, and the exposure to vulnerability as well as the severity of an event depend very much on the assets available, the *gradual aspect* of defencelessness is important in the context of poor people. It therefore appears that vulnerability is a decisive element in differentiating between poor people lacking resources and wealthy people who are able to minimise the degree of vulnerability through assets.

2.2.2 Theories of Risk: The Diversity of Perspectives

I shall begin with a comparative outline of theories and risk conceptualisations following the distinction of technical and socio-cultural notions in order to highlight major differences and contributions. This will be used to support the argument for a socio-cultural perspective of risk without neglecting positive implications of other disciplines.

Nowadays, we accept the insight that risk is a highly politicised concept (Douglas 1992, Caplan 2000, Slovic 1999), even if the action taken fails to recognise this fact. This is due to the characteristics of various debates on 'risk' whose central feature is the controversy explaining the dichotomy of risk science that takes risk as being real, and the conception of risk by individuals and human sciences that rely on the perception of risks. Conflicts and controversial notions of what is 'risk' reflect the inherent multi-dimensionality of this concept. Put simply, one may say the public conceives of risk as a broad, complex and qualitative concept, whereas many experts and government officials tend to have a narrower quantitative understanding. Firstly 'risk' is extremely contextualised, secondly 'risk' is reduced to the probability of harm or mortality. In referring to Thompson and

Dean (1996), Slovic (1999: 691) explains, "[...] a contextualist view of risk assumes that risks are characterized by some combination of attributes such as voluntariness, probability, intentionality, equity, and so on, but that no one of these attributes is essential".

A number of different disciplines from the natural to human and social sciences have shown a concern for the concept of 'risk' during the last three or four decades. Each of them adopted a different perspective according to the specific subject interest. As a result a scientific discourse continues, and a variety of distinct approaches and perspectives of risk have emerged. It is important to notice that all these have particular implications on policy making as to how 'risk' is considered in practice. Nevertheless, each contributes in different ways towards a more comprehensive and broader understanding of this phenomenon. In this sense, diversity is welcomed. Simultaneously we realise an asymmetrical use and acceptance of technical and socio-cultural perspectives which tend to neglect the latter one.

According to technical risk analyses, risks are pre-existing in nature and can be principally identified through scientific measurement, calculation, and control. Typically, and as a consequence of these premises, lay people are often portrayed as responding 'unscientifically' or 'irrationally' to risks, because they would use inferior and unsophisticated sources of knowledge, such as intuition. As Jaeger et al. (2001) state, "[...] the modern concept of risk owes its origins to the long history of the emergence of rationality in western thought" (36).[6] Hence the fundamental critique on techno-scientific approaches usually aims at its rational premises: "Cognitive science does not generally take into account the symbolic meanings, created through the social world, that humans give to things and events. Perception is limited to how humans see and understand the world

[6] For a deeper discussion of this, see Jaeger et al. (2001) who provide a comprehensive critique of the 'rational actor paradigm' in risk theory. Generally, it is not believed to totally ban the rational choice approach but to develop a supplement that better corresponds with reality, say is not so limited in its focus.

through their senses and brain-functions, without acknowledging the ways in which cultural conceptual categories mediate judgement. Consequently people tend to position themselves outside the cultural and political frameworks, likewise relationships and institutions, within which they construct their beliefs and engage in behaviour" (Lupton 1999a: 22-23).. In this traditional understanding individuals are conceived of being unbound to their social and cultural environment, they are atomised and self-interested, and represented as free actors. Technical risk analyses are not able to capture the complexity of social systems and structures. Moreover, aggregate calculations neglect lifestyle factors, anecdotal knowledge, and the influence of organisational malfunctions to risks. Some critics also argue that the dominance of science in determining risk policy provides too much power to an elite that is neither qualified nor politically legitimate to impose risk management policies on a population (Renn 1992a: 61).

Against this background, alternative perspectives have evolved. O'Riordan (1995) maintains that risk management research is essentially a product of the late 1960s and early 1970s, where the technical notion of risk was widely practised. Following this, an initial breakthrough demonstrated that there was no independently validated notion of risk, and that actuarial engineering judgement was meaningless if separated from its social context. This insight led to a second development, namely the acceptance of the incorporation of social psychological perspectives in risk management. Yet the 'psychometric paradigm' too proved insufficient, since cross-country research had shown differences in perception, demonstrating that there are additional dimensions to these. This suggests that the individual risk perceiver cannot be treated as mere statistical background. In the early 1980s the incorporation of risk management into wider cultural theory of blame, hierarchy, authority and denial brought about another shift in theoretical orientation. Simultaneously, sociologists discovered 'risk' as a crucial concept in understanding contemporary society. For an overview of these discourses refer to Appendix 2.

2.2.3 Risk: Socio-cultural Approaches

Canter et al. (1995) remark that social scientists arrived relatively late to the study of 'risk' compared to the progenitors of risk research in technical sciences. Especially prominent is the work of three social scientists who wrote extensively on risk, notably anthropologist Mary Douglas and two sociologists, Ulrich Beck and Anthony Giddens. Common to all three is their interest in modern societies and their argument that risk has moral and political dimensions related to choices and social justice (Caplan 2000).

The 'scene' in sociological perspectives on 'risk' varies greatly thereby creating difficulties in categorising, which results in many classifications being made. To avoid confusion I follow primarily Renn (1992a) and Lupton (1999a) who use similar categories (table 2.1). The postmodernist deconstructivism, however, may be regarded as particularly problematic in developing policies with practical relevance, for it generally rejects an ultimate reality in any regard, especially an individual and collective identity. The critique argues that such a point of view obstructs any social activity to deal with risk (meaning in the worst case that planning is impossible): "[...] post-modernism deals with the technological and environmental risks produced by organizations at the level of discourse only. Post-modern risk communication, then, becomes stalled in the deconstruction process. The consequence is the deferral of real risk reduction, and the most likely outcome a rising level of diffuse fear" (Jaeger et al. 2001: 227). Taking this critique as a vantage point, I opt for at least two reasons for the more moderate schools of thought.

On the one hand, we are confronted in the context of development with the question of modernity, modernisation and the many side-effects of social and cultural change like individualisation or maybe even new forms of it. In India,

one encounters a specific situation of caste reality and mobility. In particular the question of 'individual' and 'collective' becomes a significant issue.[7] For this reason, I investigate what authors Beck and Giddens relate about these transformations. On the other hand, the symbolic approach of cultural theory to risks appears to be useful because this theory does not deny the reality of risks. Such a notion of risk also offers implications for risk communication, which is conceived of being essentially embedded in social and cultural contexts. Phenomenological or hermeneutic accounts of risk open the subject to the situated meanings that are attributed to 'risk' by people themselves. This is especially useful in such contextual and very concrete environments of the case study.

Table 2.1: Schools of Thought in Socio-cultural Risk Theorising
(sources: Lupton 1999a, Renn 1992a)

SCHOOLS OF THOUGHT	MAJOR CONCEPTS	PREMISES and HYPOTHESES
Structuralist (Douglas Thompson)	Risk Culture & Identity Individual-Collective	⇒ Different societies choose their risk on both social and cultural criteria ⇒ Cultural protoypes reflect certain risk perceptions and reactions ⇒ Attention towards how notions of risk are used to establish conceptual boundaries between self and Other and morally based group identity
Neo-Marxist and Critical Theory (Beck, Giddens)	Risk and Trust Reflexive Modernity Individualisation 'Macro-sociology'	⇒ Concept of risk is directly bound to the concept of reflexive/late modernisation ⇒ Increasing individualisation: active agents free of structures, 'lifestyle choices' ⇒ Evolutionism: Three-stage periodisation of social change (pre-, modernity, reflexive modernity) ⇒ social change as learning process
Poststructuralist/ Postmodernist (Foucault)	Risk Power Knowledge	⇒ emphasise importance of identifying discourses that participate in construction of notions of realities, meanings, understandings ⇒ power relations always implicated with knowledge, no knowledge can be said to be neutral ⇒ individuals not in fixed cultural/social identities, but constantly shifting
Phenomenological/ Hermeneutic (Wynne)	Risk Subjectivity Reflexivity 'Micro-sociology'	⇒ attention on 'lived experience' and use of shared common sense meanings and knowledge ⇒ reflexivity refers not only to individualistic assessment of expert knowledge, but also based on everyday experience and relationships with other lay actors ⇒ reflexivity not simply based on cognitive judgements, but also in aesthetic and hermeneutic terms

[7] The issue of individual and group boundedness, how this is expressed and lived in India have been discussed with different points of view, for example Dumont (1991, 1998) and Mines (1994) on individualism and caste.

2.2.3.1 Sociological Perspectives: Reflexive and Late Modernity

Theorists of 'risk society' perspective are predominantly interested in macro-social processes, which they see as characteristic of late modern societies and their relation to the concepts of risk. They identified as important dynamic process reflexive modernisation, or the move towards criticism of the outcomes of modernity, and individualisation or the breaking down of traditional norms and values. Not only is it a search for universally applicable theories, but also theories about the universalising tendencies of globalisation, which is the reason why there is a primary interest in which the concept of risk is related to the conditions of reflexive or late modernity respectively.

Beck and Giddens, taking a critical structuralist approach[8], are the most widely quoted exponents of social theories on risk. Although they have much in common, they originally appear to have developed their ideas quite independently from each other (Caplan 2000). Ulrich Beck's book 'Risk Society', first published in German in 1985 (English 1992) has been enormously influential; now a landmark and classic in the field of sociological risk research.[9] Beck sees risk as having increased, for the simple reason that "[i]n advanced modernity the social production of wealth is systematically accompanied by the social production of risks" (Beck 1992: 19). He calls this phenomenon a categorical change, since the 'logic of wealth distribution' has been slowly overridden by the 'logic of risk distribution'.

Though Beck acknowledges that risks have always existed, today the nature of risks would differ qualitatively. Modern risks are typically invisible and would

[8] Lupton (1999a) calls it a weak constructivist perspective, which is supported by Beck's own statement: "I am both a realist and constructivist, using realism *and* constructivism as far as those meta-narratives are useful for the purpose of understanding the complex and ambivalent 'nature' of risk in the world risk society we live in" (2000: 212, orig. emphasis).

[9] Since then Beck continued publishing extensively on risk and developed his theory further in many articles and books, among the most notable are 'Reflexive Modernization' (together with Anthony Giddens and Scott Lash 1994), 'Ecological Politics in the Age of Risk' (1995), 'World Risk Society' (1999) and 'The Risk Society and beyond' (Adam, Joost van Loon, 2000).

escape perception. Yet another remarkable difference directly connected to this is the fact that while in the past hazards could be traced back to an undersupply of hygiene technology, today their basis lies in industrial overproduction. From this perspective, Beck defines risk as "a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself" (Beck 1992: 21). A third crucial difference unfolds with the growing capacity of technologies, as this carries the incalculability of consequences, which themselves come to be a dominant force in history and society. Beck notices that the calculation of risk as hitherto established by science and legal institutions, collapses. As a result, the rationalisation according to Max Weber's concept of purposeful rationality ('*Zweckrationalität*') is unable to comprehend this late modern reality. Instead, the concept becomes increasingly undermined by the very nature of its own progress.

Giddens deals with 'risk' especially in his books 'The Consequences of Modernity' (1990) and 'Modernity and Self Identity' (1991). Giddens' conceptualisation of risk builds on his earlier writings, especially structuration theory (Giddens 1984), on modernisation and globalisation and their relationship to everyday life. Giddens (1991) sees the world in a new phase of 'late' or 'high modernity' where risk is central. In this scenario the concept of risk is fundamental to the way both lay actors and technical specialists organise the social world. Similar to Beck's conceptualisation, modernity is apocalyptic, because it introduces new kinds of risks which appear globally, independent of their local origin. Interdependencies created in the globalising economy, for instance, potentially affects the life chances of millions of people. Arriving at a similar conclusion to Beck, Giddens labels late modernity as having a 'risk culture' (Giddens 1991: 3). He furthermore asserts that people are not more exposed to danger or more anxious in contemporary times, but in the present such fears are linked to the perception that humans have brought these risks upon themselves, as opposed to gods or fate (Giddens 1991: 109-14).

Like Beck, Giddens maintains that the view of time has changed. It is not the past that determines the present any more, but rather the future as envisaged in risk scenarios that determine the decisions made in the present. The 'colonisation of the future' is a characteristic feature of our times to control time: "In a milieux from which fate has disappeared, all action, even that which sticks to strongly established patterns, is in principle 'calculable' in terms of risk" (Giddens 1991: 111-12). The production of knowledge is interrelated and interdependent with the quality of lifestyle. It is certainly not incorrect to state that the knowledge of risks gains a new significance and brings about a major change: "[...] in class positions being determines consciousness, while in risk positions, conversely, *consciousness (knowledge) determines being*" (Beck 1991: 53; orig. emphasis). We can find in this statement a plea for agency, "[r]isk needs to be disciplined, but active risk-taking is a core element of a dynamic economy and an innovative society" (Giddens 1991: 29, cited from Caplan 2000: 6). For Giddens, risk and attempts at risk assessment are so fundamental to the colonising of the future, that he asserts the study of risk can explain much about core elements of modernity, in particular self-identity and individualisation.

Both scholars consider the process of individualisation as central to risk society and reflexive modernisation, which happens simultaneously with the growth of risk society. Problems of the system are often transformed into personal failure. Individualisation in this context refers to the requirement in late modernity that individuals must produce their own biographies. In this context, 'reflexive' denotes not mere 'reflection' but rather 'self-confrontation'. It is characterised by the absence of fixed, obligatory and traditional norms and certainties and the emergence of new ways of life which are under continuous change. Thus modernisation processes undermine the 'ontological security' - a term coined by Giddens (1984) -, since manifold processes of individualisation in modern society have eroded reliability of social networks in which human life is embedded. This type of individualisation is dependent on decision-making as it assumes agency,

the ability to shape one's own future and self-identity. Therefore, individualisation is a permanent risk-taking (Lupton 1999a).

Since risks are directly bound to the concept of 'reflexive modernity' a new paradigm emerges: the *risk society*. As a result, risk equalises in such a way as the same air and water is consumed by everyone. At the same time, some people are more affected by the distribution of risks. To explain this, Beck refers to the history of risk distribution which demonstrates, like wealth, that risk adheres to the class pattern only inversely: "wealth accumulates at the top, risks at the bottom. To that extent, risks seem to *strengthen*, not to abolish class society; poverty attracts an unfortunate abundance of risks" (Beck 1991: 35; orig. emphasis). However, this is only half of the story, for ultimately, risk distribution is not necessarily along old divisions like class or region. Since risks of modernisation eventually affect those who produce or profit from them, they have an inherent 'boomerang effect'. This argument leads Beck to infer that risk society in this sense is a world risk society (Beck 1991, 1999). One often quoted phrase indicates the new propagated logic of distribution: "poverty is hierarchic, smog is democratic" (Beck 1991: 36).

In a risk society, public criticism and disagreement arise as experts rarely agree on what constitutes acceptable risk, and no single agent is responsible for any one risk. There exists a general complicity that is matched with a general lack of responsibility, everyone is cause and effect, perpetrator and victim become identical. Such a situation, argues Beck, gives rise to the 'multiplicity of definitions'. In this struggle of all against all the urgency and existence of risks fluctuate with the variety of interests and values (Beck 1991: 30-31). These conditions have ethical implications, for causalities and responsibilities are attributed, they must always be imagined, implied to be true. Beck asserts that risks experienced presume a 'normative horizon' of lost security and broken trust. Despite the global scale, risks remain fundamentally localised, based on 'wounded

images of a life worth living'. These ideas must be believed, they cannot be experienced as such, therefore risks are 'objectified negative images of utopias', in which the human would be preserved and revived.

Similar to cultural theorists, Beck is interested in the 'cultural disposition' demonstrated by individuals and social groups to single out certain risks as important, while others are ignored. He ascribes this to the fact that "[...] cultural indignation chooses between matters of the highest 'objective' urgency, and this choice is not guided by the issues themselves, but by cultural symbols and experiences which govern the way people think and act, having their origins in history and in societal living conditions" (Beck 2002: 47). Risks therefore are culturally mediated. Therefore the existence and distribution of risks are "*mediated on principle through argument*" (Beck 1991: 27, original emphasis). For this reason, Beck (1999) proposes a transformation of the institutions themselves, of science, of business and so forth, so that 'organised irresponsibility' can be changed into a sort of organised accountability.

Table 2.2: The Transformation of Threats over Time and the Link to Reflexive Modernisation and Individualisation according to Beck and Giddens
(source: author's compilation)

Type of Society	Type of Hazard	Type of rationalisation	Individualisation and reflexive Modernisation
Pre-modern	Plague, famine, natural catastrophes, wars, but also magic, gods, demons	Predetermination/predestination: risk is fate, incalculable, attributed to external, supernatural causes	The Individual bound to traditional structuring institutions, influence formation of personal identity in a world of well defined threats
Early modern	Plague, famine, natural catastrophes, wars, industrial hazards	Transformation of threats in early industrialism into calculable risks in the course of development of rational control; risks determinable, calculable uncertainties, products of social choice	The 'enlightened' individual as (theoretically) independent rational agent who makes decisions only according to one's own interest in the sense of a *homo oeconomicus* in a world of manageable risks
Late modern	Nuclear war/accident, genetically modified food; risks on an unprecedented scale, not delimited spatially, temporally or socially like 'personal' risks in early modernity	Break down of rules of attribution and causality; the one scientific rationality is challenged by many competing rationalities	The individual as reflexive being which chooses between an infinite variety of ways of life in a world fraught with permanently new arising types of risk

Reviewers (Wynne 1996, Lupton 1999a, Caplan 2000) of Beck and Giddens' writings see many commonalities between them. Both see society as entering a new stage, represented in either 'reflexive modernisation' (Beck) or 'late modernity' (Giddens) respectively. They view this phase as characterised by new kinds of risks that have evolved over time (table 2.2). Moreover, they are both interested in political aspects of risk. In late modernity reflexivity is singled out by them as a response to uncertainty and insecurity. Consequently, people's scepticism of expert knowledge and scientific rationality increases producing similar consequences from risk:

1. Faith in science and scientists is eroded (a feature of modern western society) and knowledge (including the consequences of risk) is contested.
2. Risk society is universal, events and developments far away can have immediate effect.
3. Relationship between individual and society has shifted, old categories like class lost their significance, individualisation is of greater importance.
4. Modern concept of risk colonises the future, which thereby determines the present.
5. Ongoing search for morality remains, which can take either 'narcissist' or social forms (e.g. environmental movements).

One of the criticisms that have been advanced regarding Giddens and Beck's theorising on risk and modernity is the argument that their work focuses on modern western societies, therefore avoiding an intercultural perspective (or global perspective), that would presumably permit incorporating different forms or phases of modernity within a society. In view of this, I would propose, in India a situation is found which is essentially characterised by uneven development in time and space. Indeed, it is rather a parallelism of life worlds, which can be especially noticed in larger urban agglomerations. Particularly anthropologists ask whether the 'risk society' theory is applicable in such countries as India, which

either have not completely entered modernity or developed other forms of it (if that is possible at all). As a result, there is a general criticism of the unquestioning evolutionary assumptions made by Beck and Giddens, thus implicitly raising the issue whether these countries will ever achieve the 'same type of modernity' (see Caplan 2000). In spite of and on account of this critique, it is important to take note of these theories because they give an insight into the unevenness and plurality existent within and between different societies.

2.2.3.2 Anthropological Perspectives: Cultural Theory and Phenomenology of Risk

Cultural theory is a response to the predominant techno-scientific notion of risk, and as such a critique on the limited perspective. The leading protagonist in this field is anthropologist Mary Douglas (1982, 1986, 1992). Douglas (1992) sees her work on risk as a continuation of her early study on purity and pollution (Douglas 1966), an anthropological analysis of the symbolic meanings of ideas and rituals concerning pollution and cleanliness in different societies. Based on this work, Douglas' theorising on purity, pollution and danger underpin her understanding of the cultural role and importance of risk in contemporary western societies: "[r]isk, for Douglas, is a contemporary western strategy for dealing with danger and otherness" (Lupton 1999a: 36). The approach and that of Douglas' colleagues Michael Thompson, Steve Rayner and others is a structuralist approach to risk analysis. It seeks to identify ways in which underlying cultural structures, hierarchies and categories serve to define risk 'knowledge' and practices.

Douglas and Wildavsky emphasise for the first time the importance of culture to understand risk. They make the case for a socially informed selection of risk and view it, in contrast to the psychological individualism, as a collective construct by arguing: "Between private subjective perception, and public, physical science there lays culture, a middle area of shared beliefs and values" (Douglas and Wildavsky 1982:194), consequently "[...] public perception of risk and the

applicable levels are collective constructs, rather like language and similar to aesthetic judgement [...]" (Douglas and Wildavsky 1982: 186). The argument here is clear, namely the difference that is commonly observed between 'expert' and 'lay' judgements of risk is founded not in the fact that lay people cannot think in terms of probabilities, as often assumed in psychometric analysis, but rather that other concerns are brought about to judge risks. These concerns are essentially cultural rather than individual. The dilemma would arise because the Western tradition of thinking on judgement and choice leaves cultural phenomena out.

Crucial to this approach in understanding 'risk' is that lay responses to risk should not be considered irrational or biased if they differ from expert judgements. The heuristics (i.e. mental models) used by people to make judgements regarding risks should be regarded as shared conventions, expectations and categories that are founded on social functions and responsibilities. In this way, culture assumes two dimensions, one it is a 'mnemonic system' to calculate risks and their responses (Douglas 1986: 80-81, Lupton 1999a). Secondly, it contributes to a communal rather than individualistic notion of risk[10], taking into consideration mutual obligations and expectations: "A community uses its shared, accumulated experience to determine which foreseeable losses are most probable, which probable losses will be most harmful, and which harms are preventable. Also, community sets up the actors' model of the world, and the scale of values by which different consequences are reckoned grave or trivial" (Douglas 1986: 69).

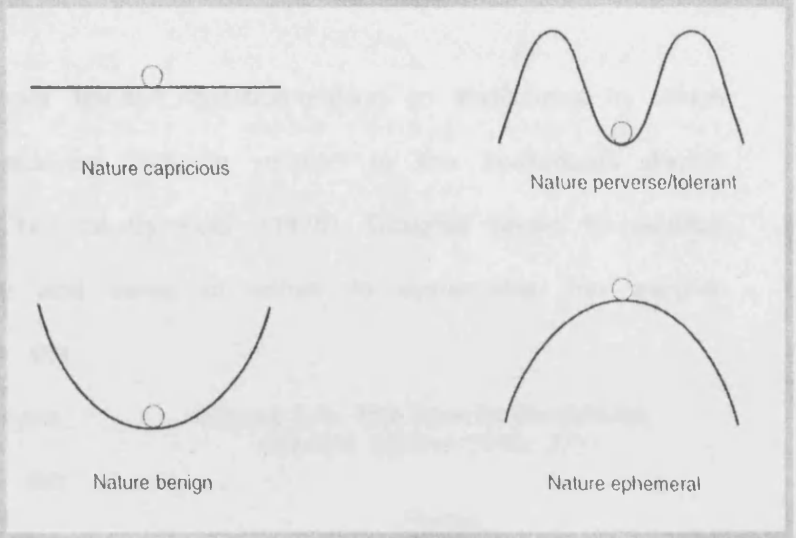
Such an approach to risk perception highlights the definition of risk presented by Douglas and Wildavsky: "Risk should be seen as a joint product of *knowledge*

[10] It should be noted that one of Douglas' major interests is the link between risk perception and individualism, a concept related to, but not the same as, individualisation. This becomes clearer in her grid/group model. It is also significant for the circumstances in India, where scholars often speak of individualism. Individualism, broadly taken, exists in all societies, while the degree of individualisation may differ.

concerning the future and *consent* about the most desired prospects" (1982: 5, orig. emphasis). Knowledge, especially new knowledge in the context of technological progress and an increasing awareness of risks is the key medium in defining risk, for it is that very culturally specific shared knowledge that allows certain risks to rise to prominence and not others. The thesis contends that all risk assessments (including experts) are biased by social assumptions people make based on accepted values and norms. It is concluded that "[c]ommon values lead to common fears, thus the choice of risks and the choice of how to live are linked and each form of life has its own typical risk portfolio" (Caplan 2000: 9).

Box 2.1: The four myths of nature

(source: Adams 1995: 34)



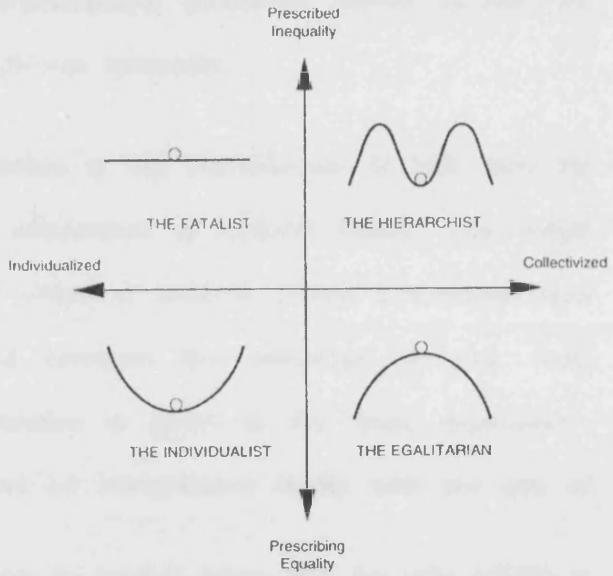
1. **Nature benign (the individualist)**: Nature gives global equilibrium, it is predictable, bountiful, robust, stable and forgiving of any insults humankind might inflict upon it. However violently it might be shaken, the ball comes safely to rest in the bottom of the basin. Nature is the benign context of human activity, not something that needs to be managed. The management style associated with this myth is therefore relaxed, non-interventionist, *laissez faire*.
2. **Nature ephemeral (the egalitarian)**: Almost exact opposite to nature benign, nature is fragile, precarious and unforgiving. It is in danger of being provoked by human carelessness into catastrophic collapse. The objective of environmental management is the protection of nature from humans. People must tread lightly on the earth. The guiding management rule is the *precautionary principle* (*'Vorsorgeprinzip'*).
3. **Nature perverse/tolerant (the hierarchist)**: This is a combination of modified versions of the first two myths. Within limits, nature can be relied upon to behave predictably. It is forgiving of modest shocks to the system, but care must be taken not to knock the ball over the rim. Regulation is required to prevent major excesses, while leaving the system to look after itself in minor matters. This is the ecologist's equivalent of a mixed economy model. The manager's style is *interventionist*.
4. **Nature capricious (the fatalist)**: Nature is a random world, it is unpredictable. The appropriate management strategy is again *laissez-faire*, as there is no point to management. Where adherents to the myth of nature benign trust nature to be mild and friendly, the believer in nature capricious is agnostic: the future may turn out well or badly, but in any event it is beyond his control.

The acceptability of risks is a political issue, which is evident from Douglas' (1992) most recent collection of essays on risk and blame. Similar to Beck,

Douglas strongly emphasises the political use of the concept of risk in attributing blame for danger. Disasters that contaminate the air and soil and poison the water generally are turned into political debate, frequently blaming someone already unpopular. Concluding from this premise, she asserts, in all places at all times the risk universe is ethical and the concept of risk can be used 'forensically' with regard to what is held to be morally right or wrong. This 'forensic theory of danger' attempts to explain misfortune by looking back at the causes. In this way the 'modern, sanitised discourse of risk' replaces concepts like sin, which were originally used to explain misfortune. Concepts like sin, taboo, pollution and blame are, according to Douglas, analogous to the modern concept of 'risk'. They are a means of binding a community together, establishing identity, by ensuring that norms and boundaries are maintained.

According to Douglas, individuals transfer decision-making to institutions in which they live. This focuses on studying 'risk' in relation to the institutional design (Douglas 1987). In her book 'Natural Symbols' (1970), Douglas began to develop a typology of social structure and views of nature to systematise her insights from earlier work. This was the origin of grid and group analysis, which informs all cultural risk analysis and has been further developed substantially by several scholars (Thompson et al. 1990, Schwarz and Thompson 1990, Rayner 1992). In these works the authors inquire into the origins of the beliefs concerning nature that guide risk-taking decisions (box 2.1).

Figure 2.1: The four Rationalities
(source: Adams 1995: 37)



Based on insights gained by ecologists, Schwarz and Thompson (1990) made a crucial step in incorporating risk perception and coping strategies into the model by linking them to the 'myths of nature': "These myths of nature are the simplest models of ecosystem stability that when matched to the different ways in which managing institutions behave, render those institutions rational" (Thompson et al. 1990: 26). Both the conceptual models of grid-group and the myths of nature were mapped onto each other (figure 2.1). Adams (1995) emphasises, these four distinctive world views are the basis of four respective rationalities. Adams notes that rational discourse is recognised by the adherence to the basic rules of grammar, logic and arithmetic, yet in an uncertain world the premises upon which rational arguments were constructed are themselves beyond the reach of rationality: "Disputes about risk in which the participants hurl charges of stupidity and irrationality at each other are usually seen, upon dispassionate inspection, to be arguments on which the participants are arguing from different premises, different paradigms, different world views, different myths of nature, both physical and human. These different rationalities tend to entrench themselves. Both the paradigms of science and the myths of cultural theory are powerful filters through which the world is perceived, and they are reinforced by the company one keeps" (Adams 1995: 37).[11] Apparently this type of analysis supports the potential for studies in communication processes related to risk, for this approach underlines the notion of diverse rationales.

Phenomenological or hermeneutic approaches to the phenomenon of 'risk' may be seen in line with the anthropological endeavours of cultural theory. The major difference though lies in the focus and scope of analysis, which concentrate less on macro-structures that organise and constrain the meanings of risk, than structuralist approaches do. Instead, attention is given to the 'lived experience', how individuals experience their world as an interpretative reality with the use of

[11] Examples of the application of this typology can be found in Adams 1995 (on traffic pollution in London), Douglas 1992 (on HIV/AIDS), and Scott 2000 (compares differences in British and German risk perception).

shared common sense meanings and 'knowledges'. As Skinner states, "[o]ur everyday encounter with risk [...] appears to be socio-cultural and phenomenological and takes place in a 'perceptual world organised through language and symbolic forms, as well as through social and institutional relations and practical activities in that world". (Skinner 2000: 156, citing Good 1996). In doing so, the agency of individuals is stressed more than that of structures.

Phenomenologists argue that notions of risk differ from locale to locale, i.e. in the micro-context of risk meanings: "Phenomenological accounts examine how specific actors (or subgroups) within a certain socio-cultural setting construct their risk understandings as part of their interactions with others, albeit within the broader frame of social structures" (Lupton 1999a: 27). With the focus on the subject and subjectivity, this perspective offers a micro-sociological way to explore in detail the diverse and dynamic responses to risk which lay people employ. It thus appears as a consequent complementary view to the macro-level explanations of 'risk society' on the one hand, and the symbolic perspective of cultural theory that is committed to examine risk as it is used to maintain and reproduce concepts of group membership, on the other hand.

From these premises, three major research issues arise for phenomenologists, namely the reflexivity of 'lay' people, risk 'knowledges' ('local knowledge') and power relations, as well as interests in the differences of knowledge systems between 'lay' people and experts, and within groups of 'lay' people (Lupton 1999a: 104-22). A phenomenological perspective views reflexivity as going beyond a mere response to expert knowledge by incorporating information provided by family members, friends and colleagues. People are portrayed as choosing rationally, based on their own evaluation, by acknowledging that all these approaches do have their own respective logic and rationale. When focusing on the ingrained intricacies of daily life, a phenomenological approach particularly highlights the conflicting positions and rationalities between expert and lay

'knowledges', and between everyday life experiences and generalised assessments of risk, by emphasising aesthetic and habitual aspects in order to understand different rationalities that underpin risk-taking, and the feeling of being 'at risk'.

2.3 Risk Communication in Development and Planning

2.3.1 Risk Communication and Development Communication

The management of risks is a complex and socially far-reaching task. How management is organised becomes a central issue, because there are essential implications for individuals and entire populations. As we have seen, each type of risk management is inter-linked with risk analysis, which is how risks are defined and selected. Various theoretical approaches to risk provide actors with a set of ideas about how to manage risks. The argument provided here underlines that sociological and anthropological perspectives of risk can serve as a framework for risk communication, thereby improving the atmosphere of risk decisions and acceptability, and consequently supplementing quantitative data. These theories on risk form the basis of this research in analysing risks in the slums of Ahmedabad, and demonstrating the need to include communicative processes. Consequently, the main task will be to place risk communication in an urban environment and by doing so examine communication theory, development communication, collaborative planning and especially risk communication.

2.3.1.1 Emergence of Risk Communication

The emergence and development of risk communication must be seen in line with the epistemological insights gained in regard to the theorising of 'risk'. Failures in risk management by regulatory bodies (usually government organisations) as well as achieving wider public acceptance, has further accelerated interest in risk communication. Early proponents from America in the mid-1980s fostering risk communication were Baruch Fischhoff and Paul Slovic.

From that period, risk communication became "[...] recognized as a necessary component in risk management and community decision making in environmental and occupational health" (U.S. Public Health Service 1995: 2). It was prominent within the U.S. Public Health Service and the U.S. Environmental Protection Agency (EPA).

Similarly, with the epistemological shift in conceptualising 'risk', there has been an analogous development from conventional techno-scientific risk communication towards an alternative perspective of risk communication. This first notion of risk communication implies an intentional transfer of information, which is centred on a risk management agency as the communicator and groups of the public as the 'target audiences'. Experts in their role as regulators protecting public health or as employees of industry or special interest groups would inform citizens on the appropriate concerns of risks, while the recipients of the risk message were assumed to be rationally thinking individuals who form their own judgements and attitudes according to the messages delivered. This thinking presupposes the premise of the rational actor paradigm that individuals are free to select actions based upon their own subjective expectations of future consequences and thus have alternative choices, which is the primary reason why there was no recognition of the social and cultural dimension, neither in the assessments of experts who made scientific and 'value-free' decisions nor of lay people's judgements (Jaeger et al. 2001: 130-35).

This still dominant model of risk communication encompasses an information transmission with the goal of educating the recipient via the passing of quantitative data information about probabilities and consequences of events, from one information bearer to another, through a medium of minimum distortion. Evolving criticism emphasised that information transmission is only one part of communication, which also involves developing shared meaning among individuals, institutions, communities and establishing relationships in an atmosphere of trust

(Rayner 1992). A fundamental difficulty of conventional risk communication is the attempt to base an analysis of human communication on the rational actor paradigm that begins with isolated individuals.

The search for more democratic risk assessment is confronted with a set of epistemological and political problems. For instance, in epistemological terms there is the issue of how to relate empirical data with norms and values, whereas in political terms this refers to how the techno-bureaucratic form of regulation in institutions can be transformed into less hierarchical democratic structures, an approach recommended by exponents of communicative planning theory. A call for institutional change is the most popular suggestion. New institutional forums, e.g. risk arenas, and methodological approaches are thought inevitable to widen the risk assessment process to non-experts (Renn 1992b). However, the contemporary approach to risk communication (as mainly practised in the USA) is still insufficient since experts often present and discuss their findings in public, with the public as spectators. Unsurprisingly, this procedure results in an alienation of risk assessment and the old problem of legitimacy (Fischer 1996). Risk communication as a complex discursive process is a development slowly penetrating into global organisations' awareness. This is visible in the 'FAO/WHO Expert Consultation on Risk Communication', which remarks, "[p]resent experience [...] has shown that there is a distinction between the preparation and dissemination of risk messages and the process of communicating these messages. [...] modern approaches include an interaction and dialogue between the risk communicator and the receiver of the communication [...]" (FAO/WHO 1998: 1).

In a review of the history of risk communication, Fischhoff (1995) identifies eight developmental stages of evolution that outline the parameters of communication processes in each stage according to the dominant risk management strategies (table 2.3). Interestingly, like the evolution of the risk concept, Fischhoff remarks

that each stage is characterised by a focal communication strategy and builds on its predecessors thinking. Hence his note that the 'ontogeny'[12] of each state recapitulates the 'phylogeny'[13] of risk communication, and succeeding stages would not merely replace earlier ones, is instructive. In this view, the content of the table reveals a tendency from conceptual narrowness in the early stages towards more open and democratic procedures in risk communication processes. In fact, the first five periods impressively demonstrate the dominance of the techno-scientific notion of risk management. While strictly seen the first stage (began mid-1970s) does not include communication at all, stages two to five are characterised by a conventional notion of risk communication. It is only in the sixth stage that non-scientific issues such as trust and power relations have been recognised. Up to that point communication means a one-way process, messages to be delivered to 'the public'.

The evolutionary process, as presented by Fischhoff, vividly demonstrates that the idea of accepting and integrating people's 'local knowledge' is one of the latest perspectives. Yet a new perspective alone is not sufficient to materialise in action, one must rather distinguish "[...] between capacity and performance, that is, between having the ability to execute a task and exploiting that potential. Individuals (and organizations) that have gone through a developmental process may still not use what they have learned. That may reflect sloppiness or unwillingness to make the effort". Therefore it is necessary to understand that "[i]n some ways, communication is like an insurance policy, and is a fixed cost that can prevent larger damage" (Fischhoff 1995: 143).

[12] The internal development of practices within each phase.

[13] The overall developmental phases of risk communication since its emergence.

Table 2.3: Developmental Stages in Risk Communication
(source: author's compilation based on Fischhoff 1995)

Developmental stages	Characteristics
1. All we have to do is get the numbers right	◆ Experts try to master the design, execution, and operation of their technology ◆ Potential sources of information have no intent of saying anything ◆ Problem: public suspicion
2. All we have to do is tell them the numbers	◆ Numbers delivered to the public close to the form in which they are produced ◆ Straightforward delivery reflects distance between analysts and their audience, undermining credibility ◆ Problem: suspicious recipients adjust risk estimates upward or downward to accommodate likely biases
3. All we have to do is explain what we mean by the numbers	◆ Experts needlessly obscure or complicate numbers, also due to uncertainty and dispute among them ◆ There is little selection of data, instead they should think about what people need to know, which is difficult with distant and diverse audiences ◆ Problem: reluctance of many sources to use numbers at all, and much less probability distributions
4. All we have to do is show them that they have accepted similar risks in the past	◆ Risk comparisons in which unfamiliar risk is contrasted with a common one, but can backfire and damage one's credibility ◆ Believe that people want zero-risk if do not accept a small risk ◆ Problem: risk decisions are not about risks alone, people may accept high risk-high benefit, but refuse low risk-low benefit
5. All we have to do is show them it's a good deal for them	◆ Changes in more than just the formatting of messages: acknowledging people's right to compensation for risk ◆ Analyses can be specified in different ways, with alternative specifications representing different ethical positions: exposition of uncertainty among experts ◆ Attractiveness of action depends on how it is presented: risk and benefit estimates ◆ Problem: 'framing effects' may lead to suspicions of manipulation, people may just present the perspective that makes sense to them
6. All we have to do is treat them nice	◆ Getting content of communication right requires significant analytical and empirical effort, it is a complicated matter ◆ Recipients may ask how trustworthy communication and communicator seem to be, even perfect message can be poisoned by an inappropriate delivery ◆ people want to be treated respectfully, it is matter of taste and of power, otherwise it looks like neglect, need for suitable demeanour increasingly recognised as a public right ◆ Problem: niceness may repel recipients if it seems as though experts are doing the public a favour
7. All we have to do is make them partners	◆ Members of the public want a more active and constructive role, at times they have information to consider or just want a seat at the table ◆ Using and acknowledging lay people's 'indigenous knowledge' ◆ If experts see things differently, then mutually respectful relationship ◆ Problem: permanent negotiation and re-negotiation of relevant issues in participatory and democratic atmosphere
8. All of the above	◆ Perfect communication in an ideal world?

2.3.1.2 Emergence of Development Communication

The field of development communication emerged in a comparable manner to risk communication. While historically associated primarily with rural development and the developing societies, developmental communication may be also applied to urban environments. However, there is virtually no literature that deals explicitly with communication in urban areas, although sometimes considered in the context of people-oriented development initiatives. Only recently has more attention been paid to this field (see Riley and Wakely 2003, Gandelsonas 2002).[14] Development communication is said to have broadly two roles. One is the transformation role through which social change is sought towards a higher quality of life and social justice. The other considers a socialisation role through which it strives to maintain some of the established values of society that are consonant with development and social change resulting in development communication that stresses human development by focusing more on human dignity, safety, justice and equality (Gupta 2000: 38, Moemeka 1994: 13).

Two trends have successively developed within the field of development communication. One approach favours large-scale actions and relies on mass media, whereas the second promotes community communication at grassroots level with small-scale projects by using means such as videos, posters, community participation, and so forth. Typically, these perspectives are linked to the evolution of generic development models and communication models, as similarly observed with the emergence of risk communication. Apparently the epistemological propositions with respect to understanding risk and development in the context of communication converge towards similar premises. This is obvious in the models displayed in table 2.4 which reflects the major evolutionary path of development communication.

[14] For instance, Portland State School of Urban Studies and Planning at Portland University, Oregon, is one of a few universities which offer comprehensive modules on "Communications and Community Development" (http://www.pdx.edu/usp/cd_concentrations.html#ccd).

Table 2.4: Major Trends in Development Communication
(adapted from Bessette 2004: 59-61)

Communication Paradigm	Development Paradigm	Time Period	Developmental and Communicative Characteristics
1. Persuasion and information transmission	Modernisation theory	1950ies and 60ies	• Mass media approach • Sufficient to disseminate knowledge and technologies • Aimed to increase economic activity and changes in values and attitudes • limitations: one-way communicative flow; based on stimulus-response terms; sole focus on increasing productivity
2. innovation dissemination model	Modernisation theory	1960ies	• transmission of information to farmers by a resource person • extension of agricultural innovations exported to developing countries • limitations: no distinction of different target groups; failed to recognise economic and political structures; within the framework of vertical, top-down communication
3. no explicit model	Endogenous development	1970ies ongoing	• development a global process, which happens from within • development a participatory process of social change • non-material notions recognised: social equality, liberty, grassroots participation, etc.
4. no explicit model	Dependence theory	1970ies ongoing	• the "centre" (the North) develops at the expense of the "periphery" (the South) • obstacles come foremost from external, not internal reasons • mass media cannot act as agents of change • limitations: emphasis on international level, lost sight of contradictions of development on local level
5. consciousness model	Dependence theory	1970ies ongoing	• communication inseparable from social and political processes necessary for development • effective communication must bridge acquiring technical knowledge and awareness-raising, politicisation and organisation processes • communication a tool that people can use to take control • limitations: approach emphasises confrontation; politicisation of development communication may lead to an overthrow of government
6. community media development	"Another development paradigm"	1980ies ongoing	• communication approach based on education rather than politicisation • development paradigm stresses also development of cultures and values • use of small media networks and grassroots approaches • people's participation reinforces chances of communities to adopt activities appropriate for them
7. eclectic combination of various concepts	"Another development paradigm"	contemporary	• a) combination of community approach and small media with practices linked to a model for disseminating innovation • planning of communication activities as a supplement to development projects • aim is to generate mutual understanding/consensus in a development process • b) combination of community approach and awareness-raising model • c) democratic development communication: emphasises grassroots access to the communication process to promote social justice and democracy • limitations: communication alone is insufficient, when material resources and political will are lacking; communication takes time and involvement which may lead to frustration

Contemporary development communication generally refers to the planned use of strategies and processes of communication aimed at achieving development. The concept of participatory development communication means moving from a focus of informing and persuading people to make attitudinal changes, to a focus on facilitating exchanges between different stakeholders. This may be seen as a blend of development communication and participatory approaches (Bessette 2004).

Consequently, communication tools (media) are not used with a view to disseminate information and knowledge from a resource person, a researcher or expert, to community members, but to facilitate the realisation of a set of actions a community decides to implement in order to enable change for development. This interpretation relates the seemingly 'soft', often intangible dimensions of communication to a tangible development goal or problem that permits a focus on the gains of such a process (people learned new ideas, understood the problem better, an empowerment of various stakeholder groups, increased confidence), and the material outcome of a development initiative (Bessette 2004: 48).

Clearly, the longevity of conventional (risk) communication is a result of the dominant psychometric paradigm in risk management and the weakness of alternative perspectives provided by sociological and anthropological studies. Nonetheless, the state of the art in risk communication indicates a shift towards an alternative notion with potential application in urban planning procedures in developing countries. To this end, the approach I shall offer for the communication of risks is rooted in an interpretive perspective combining notions of development and risk communication.

2.3.2 Communication as a Cultural Process: Hermeneutic Interpretivism and Symbolic Interactionism

The evolution of risk communication outlined above indicates at least two extreme positions in conceptualising communication. While contemporary communication theory favours notions of a culturally and socially inclusive concept, there have been earlier notions that were characterised by a narrower perspective. The 'process school model', which takes a technical approach to communication, has its origins in the early meaning of communication referring to the lines of communication such as roads, canals and railways. Today this thinking on communication, which can be regarded as a kind of metaphor of nineteenth century transport, is still replicated. Kress (1993: 4) describes it as follows: "This model has three components, the sender (S), the message (M), and the receiver (R), linked in a unidirectional way S $\Rightarrow$ M $\Rightarrow$ R. This is much like a Leeds textile manufacturer (S) might have thought about sending a bale of cloth (M) in a barge on the Leeds-Liverpool canal to a merchant (R) in Liverpool". From this perspective communication is almost completely decontextualised. A presumption that communication involves the same message being transmitted intact from the sender to the receiver occurs (Schirato and Yell 2000).

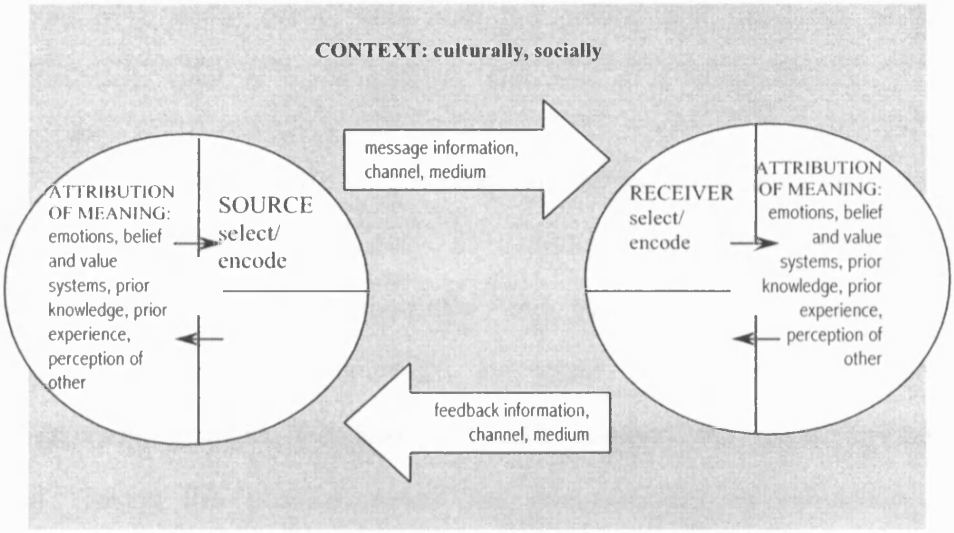
Against this technical notion, scholars set a more elaborated theory of communication as cultural practice (Bolten and Erhardt 1995), offering definitions of communication that emphasise the social construction of meaning and interaction: "The term encompasses the complex, socially located processes and structures of the production, transmission and reproduction/reception of meaning. As a process, performed by social agents, which involves salient cultural values and social structures in the reproduction of existent, or the production of new, meaning" (Kress, 1993:182).

Indeed, it is the study of actual discourse which is currently the preferred way to analyse human communication. The communication process is recognised to be

co-operative, involving a co-ordination and negotiation of behaviour among two or more people. This is known as the 'transactional perspective'. These approaches do not view communication as a set of isolated message transmissions from one person to another, rather, they conceive of it as an emergent process, changing form and purpose continually as communication proceeds (Beeman 2001). This process is sometimes exemplified in models as illustrated below (figure 2.2).

Figure 2.2: Model of the Communication Process

(source: Gutteling and Wiegman 1996: 30)



According to this view, communication as a cultural practice requires various forms of 'cultural literacy'. A concept referring to Pierre Bourdieu's (1977) work suggesting that practice is constrained by, and develops as a response to the rules and conventions of a culture. In other words, an observed behaviour will be incomprehensible if an individual knows the norms and values of a certain culture but is not aware of the unspoken codes and symbols relevant to a situation. That individual remains an outsider, and in the case of communication, it may lead to conflicts (Shahid 1993: 72). Communication and culture are not separate entities but dynamically interrelated, which encompass both knowledge of meaning systems and an ability to negotiate those systems within different cultural contexts (Schirato and Yell 2000: 4).

Every cultural practice is a communicative event and every act of communication is a cultural event. Culture is analogous to and can be compared to language or a text (Clifford 1988). To the individual these codes appear usual, normal, natural, and acceptable of the way the world is, the appropriate picture of human nature.[15] Language is widely regarded as being the fundamental feature of any communicative process[16], including all verbal and non-verbal activities (Beeman 2001, Kress 1993). Henceforth culture, understood as a complex set of values, norms and meanings as produced, reproduced and practised through interaction by members of a social group, sets both the ground and the limits of what can be communicated, what is communicable, and how it is communicated.

By virtue of the importance of meaning in all communicative interaction, the interpretive and hermeneutic capability of individuals involved in these processes becomes a crucial element. Interpretivism and hermeneutics are based on inter-subjective understanding of meanings in social action. Interactionist scholars consider communication as the linking element between the terms 'symbolic' and 'interaction'. Taking this position means that communication is interaction, and for interaction to unfold, interactants must communicate, i.e. human communication is 'symbolically mediated interaction' (Burkart 1995). As Denzin (1992: 98) formulates: "Communication [...] is the process which produces significant symbols", and which "refer[s] to an ensemble of social practices, social forms, social relationships, and technologies of representation which construct definitions of reality. The social practices, relationships, and technologies of communication symbolically interact. They do so in historical moments, to produce particular ideological, emotional,

[15] An analysis of these processes must necessarily be interpretative (as against the formal-logical approach of cognitive anthropology), because even data collection must be regarded as a communicative process where the researcher 'translates' and at the same time transforms information. This can be viewed literally (a translation from one language into the other) as well as metaphorically (a translation of the meanings, values etc. of people into the cultural context of the researcher). These issues have been discussed for instance in Briggs 1985 and Clifford and Marcus (1986).

[16] See studies on linguistic relativism by the anthropologist and linguist Edward Sapir.

and cultural meanings which are connected to the lived experiences of interacting individuals."

This perspective goes so far as to say that the study of culture could also be called the study of communication, because it is argued that what is studied are the ways in which experience is worked into understandings and then disseminated and celebrated. In Geertz´ writings, such a view is evident in his notion of culture as symbolic action when he asserts, "culture is public because meaning is" (Geertz 1993: 12). He contends "that man is an animal suspended in webs of significance he himself spun, I take culture to be those webs, and the analysis of it to be therefore [...] an interpretive one in the search of meaning" (Geertz 1993: 5). Geertz' thesis is of particular interest for our purpose, since he considers one aim of anthropology as 'the enlargement of the universe of human discourse', a statement which refers to the attempt of understanding each other in an environment of cultural diversity as increasingly found in cities across the globe (see Sandercock 1998).

However, a certain convergence of values is inevitable for communication to function, because "[...] in order to interact with one another, actors must arrive at a shared sense of the social world which typifies events and circumstances in the same way and so establish a common reality in which they can participate together" (Walsh 1998: 27). Elements of a communication process would therefore involve the interaction of (at least two) agents, a dialogue between them that encompasses either interpretation and/or learning processes using or creating a state of 'mutual knowledge', which further requires a capability of mediation of 'frames of meaning' in understanding each other (Giddens 1988: 147). Undoubtedly, these sorts of processes cannot be treated in terms of a formal logic so inherent in conventional western thought. Discourse or communicative rationality, as Habermas (1984) stresses upon, requires understanding and learning. Symbolic or interpretative interactionism follows a rationality which is

repeatedly negotiated by all actors through learning that in turn is able to unfold a common ground to understand each other.

Not long ago has the emerging field of 'culturalist risk communication' connected to symbolic and interactionist perspectives of communication (see table 2.3 above). As Tulloch (1999: 38) notes, "[d]espite the fact that the field of risk communication still remains predominantly empiricist in its main centres and journals, there are significant signs that the anti-technicist, culturalist focus [...] has gained a toe-hold in this influential area, with significant methodological implications." A key emphasis in culturalist approaches to risk communication policy is to search through negotiation for solutions in order to have broad-based support and sustainable outcome. Significantly, on account of an emphasis on incorporating multiple perspectives of stakeholders, the culturalist tradition of risk communication emphasises increasingly both qualitative and processual research methodologies. It is important in this respect now, to examine the scope of such a notion within contemporary urban planning theory.

2.3.3 Communicative Action and Planning Theory

With the 'communicative turn' (Healey 1992, 1996), perspectives mentioned above became very influential in planning theory, stimulating a debate about governance, democracy and institutional change (e.g. Forester 1989, Healey 1997, Sager 1998). Particularly Jürgen Habermas' 'theory of communicative' action gained much attention in this perspective of critical pragmatism. Besides, Habermas also deserves special attention on account of his theorising around rationality and reason, which has been reflected in risk theory too, as an alternative approach to the rational actor paradigm (see Jaeger et al. 2001). Thus, he provides firm ground for an integral approach to both urban planning procedures and processes of risk communication.

The move in planning theory towards an interpretive phenomenological perspective must be seen in the wider critique of the prevalent rationality applied in planning, because it challenges the founding epistemologies of planning theory (instrumental rationality of modernist planning) by cultural diversity and a strengthening of civic society (Flyvbjerg 1998). These philosophical critiques emerge largely from postmodernism's deconstructive, pluralistic tendencies. In this notion rests also the core aim which is made explicit in a call for the democratisation of planning practice and empowerment of discourse communities. The 'old' planning practice is characterised by knowledge constructed predominantly through techno-scientific analysis and deductive logic. It is the privilege of 'experts,' while other forms of knowledge and value systems, experiential, local, intuitive, tacit, expressive 'knowledges' which draw on moral and aesthetic realms rather than on scientific logic and empiricism are not recognised (Healey 1997).

McGuirk states: "The normative aim of CPT [collaborative planning theory] is to replace instrumental rationality with Habermas's (1984) notion of communicative rationality. [...] communicative rationality is said to draw on subjects' practical consciousness in which the world of physical things, the world of inner experience, and the social world of roles overlap. Therefore meaning, value, understanding, and knowledge are generated inter-subjectively and through deliberation that draws on diverse forms of knowing, reasoning, and representation" (2001: 196). This notion of rationality accepts the social construction of meaning, the socially embedded ways of thinking and acting in varied discourse communities, and the interpretative nature of the world. Such an understanding of rationality would allow an application in varied cultural systems of meaning, it can be used cross-culturally.

Consequently, the outcomes of a communicative planning practice are not oriented to the pursuit of instrumental or strategic interests, rather impartial generalised

interests would be collectively derived through deliberation aimed at establishing new sets of collective values and a new 'shared language'. So, communicative planning may be regarded as a deeply social process of making sense together: "Public policy, and hence planning, are thus social processes through which ways of thinking, ways of valuing and ways of acting are actively constructed by participants" towards collaborative consensus-building (Healey 1997: 29). Viewed in this light, the generation of social and intellectual capital is another important outcome of suchlike notions. Institutional transformation, through the development of ideas in 'policy discourses' by changing systems of meaning, forms the core of collaborative practices to achieve a more socially just planning process.

This is where Habermasian concepts of 'communicative distortion' and 'ideal speech situation' are introduced in planning theory. While distortion occurs when groups seek to extend their power to restrict argumentation by excluding participants, communicative planning would minimise distortions and so achieve power balance by approximating Habermas's 'ideal speech situation'. As the name of the concept signifies, an 'ideal speech situation' is only imperfectly and at best temporarily attainable. It means that all relevant interests are represented in the deliberation, participants equally informed, able to represent themselves, and equally empowered in discussion (Habermas 1984, Innes 1998). The assumption is that when such distortion is minimised participants may be free to deliberate until a series of common meanings and values can be established.

Habermas identifies the concepts of 'discourse' and 'interaction' as the two types of communication (Nowak [17] 1984: 79). Accordingly, communicative action is interaction because the validity of the context of meanings is presupposed by participants to exchange information. In discourse, the validity claims ('*Geltungsansprüche*') and the object of communication is debated. That is why in

[17] As an interesting note, to my knowledge this author provided the first reflection of Habermas' work in planning theory. Yet since it was published in German in a university series it is unknown to English speaking scholars. So there is no link between these approaches.

discourses no exchange of information takes place, rather all participants seek a problem-oriented consensus through the most appropriate argument, which exists in communicative action. Following these arguments, Nowak (1984: 81-83) defines communicative action as the implementation of planning, an exchange of information without questioning planning itself, whereas a discourse is an earlier consensus on meaning and understanding of planning, i.e. about content and goals. However, a communicative planning theory requires a discursive concept of rationality. Here, Nowak (1984: 91-92) refers to Habermas who classifies planning approaches and distinguishes various structures of planning theory according to three prevalent concepts of rationality.[18] Accordingly the 'decision-logical planning' approaches adhere to the rational choice paradigm (*'Zweckrationalität'*) with subjectively rational action. Secondly, the paradigm of self-regulated systems, 'system-theoretical planning approaches' (*'Systemrationalität'*), is appropriate for empirical theories, where identifying well recognisable units with clear-cut boundaries is possible. Yet this is not the case with society, where the boundaries can only be set artificially. Lastly, 'communicative planning approaches' have evolved, which are based on a decision-building discourse paradigm. They are usually viewed as a further development of the former two.

In conclusion, decisive to the structuring of various planning theories is their selection of the concept of rationality. The argument would be that the long predominant instrumental rational action paradigm in planning theory and practice overlooks important aspects of social action. The result is one-sided and gives a distorted picture of human activity. In contrast, discursive rationality opens the idea of a socially relevant rationality. According to Habermas, discourse is the restoration of a problem-oriented consensus by the means of reason, but importantly, reason in this sense goes beyond mere instrumental utility. 'Aesthetic' and 'normative' reason are comprised, thereby forming a communicative practice

[18] Interestingly, Beckmann (1997) also deploys these concepts of rationality to analyse different approaches and their function in participatory development cooperation.

which is grounded in the particular 'lifeworld' of the participants and aims at achieving, maintaining and regenerating consensus. A consensus that rests in inter-subjective acceptance of issues whose validity can be questioned and criticised. Generating a communicative community with a balance of power is seen as part of the process and inevitable especially for building compromise (Pusey 1987: 78-81). It is against the background of such thinking that the conceptual framework has been formulated.

Chapter III

Urban Risk Communication: A Conceptual Framework

III. Urban Risk Communication: A Conceptual Framework

This chapter is concerned with formulating an integrated socio-cultural concept of risk communication in considering the intricacies of managing a complex urban environment. In order to accomplish this, I shall first make explicit my conceptualisation of risk, followed by detailing the relationship to communication within an urban governance approach.

3.1 A Conceptualisation of Risk

In this section I venture to undertake a synthesis of the reviewed theories in order to grasp their conceptual implications. At the outset, consideration of some features of the nature of the concept of risk is advisable, as it is frequently viewed analogous to the game theory developed by Wittgenstein (Rayner 1992). I feel it is an extremely helpful notion since this idea highlights the difficulties in defining risk, which frequently result in social conflicts. It is this 'contextualised conception' of risk which gives the appearance of a game. Crucial to understanding this 'risk game' is the notion comprising of time limits, rules of play, opponents, and criteria for winning or losing, but none of these attributes is considered essential to the concept of the game.

Typically, the category of games is an open concept, with the occurrence of a single feature in every member of a category not being sufficient to justify any claim that this is the essence of the category: "In all of these systems of concept formation, items at one end of the chain that constitutes a category need not have

any conditions in common with those at the other end. This is the case with the category of risk" (Rayner 1992: 94). As a result causing much confusion, there are no universal rules for games and no universal set of characteristics for describing risk. This is essentially reflected in the multidimensional, subjective, value-laden, frame-sensitive nature of risk decisions. From this point of view probabilities and consequences, usually regarded as the essence of risk, are placed along with other risk attributes like voluntariness, equity and other contextual parameters. Ultimately there are no necessary or sufficient conditions that define risk (Jaeger at al. 2001, Rayner 1992, Slovic 1999).

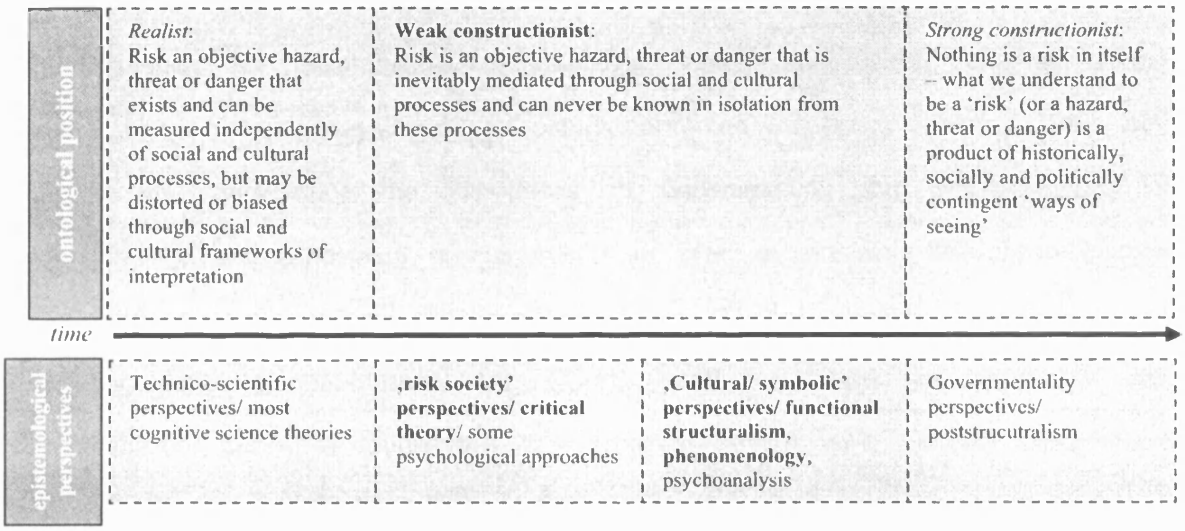
3.1.1 Conceptual Parameters

All socio-cultural approaches discussed above have some central points in common. They all view risk as having become a central cultural and political concept by which individuals, social groups and institutions are organised, monitored and regulated. They all share the insight that risk has become an increasingly pervasive concept of human existence in western societies. It is a central aspect of human subjectivity and seen as something that can be managed through human intervention and, finally, that risk is associated with notions of choice, responsibility and blame.

Figure 3.1 presented here refers to the evolutionary process of the concept in theory. Though keeping in mind that categorisations of theories are generally not easy to build, the figure nevertheless demonstrates the links between risk epistemology and ontology. It indicates the evolution of the risk concept itself in terms of these epistemologies and additionally, the ontological position of how the very reality (or 'non-reality') of risk is viewed. Notably, there are no strict boundaries between these theoretical positions, since they influence and chronologically overlap each other and have given rise to new thoughts and ideas in a continuous flow of

further developing an improved understanding of the risk phenomenon, thus steadily adding and integrating more aspects to it to ultimately achieve a more precise notion of what 'risk' represents in its 'empirical reality'. This is especially interesting and important to mould a broad but consistent concept of risk for this research.

Figure 3.1: The Continuum of Approaches to 'Risk'
(author's compilation)



It may be argued that the earliest risk concept merely encompassed quantitative analysis, regarding risk simply as probability of an adverse event or consequence. In contrast, the socio-cultural or constructivist position brought in the dimensions of society (in 'risk society') and of culture (in cultural theory). In 'risk society' the emphasis is on macro-social structures and change, on how these structures relate to the individual and how they are organised, less on the symbolic meanings that underpin these. On the contrary, 'culture' as a term has become more and more identified in anthropological theory with shared belief and value systems rather than material manifestations. An insight we owe to the development of symbolic anthropology in its interpretive version (see Douglas 1966, Goodenough 1963, Geertz 1993, Renner 1983).

III. Conceptual Framework

Everything that is measured, identified and managed as risks is always constituted via pre-existing knowledge and discourses. The created realities involve the reproduction of meaning and knowledge through social interaction and socialisation and rely on shared definitions. Consequently knowledge, including scientific knowledge, is never value-free but rather always the product of ways of seeing since a risk is not a static, objective phenomenon. It is constantly negotiated and constructed as part of social interaction and the formation of meaning. The emphasis here lies in regarding risks as "assemblages of meanings, logics and beliefs cohering around material phenomena, giving these phenomena form and substance" (Lupton 1999: 30). Through that perspective the importance of understanding the embeddedness of understandings and perception of risk comes to light, emphasising that these notions often differ between actors who are located in different contexts and thus bring competing logics to bear upon risk. At this point, we touch the sphere of risk communication, getting a rough idea how complex, socially and culturally deep-rooted it is.

According to the position taken for this study ('weak constructionist', see highlighted parts in the diagram) it is nothing less than the cultural mediation of 'real' hazards. However, the highlighted theoretical positions show that there are points of contact or interfaces with other theories. That means, 'reality' from the phenomenological point-of-view is constructed through creation of risk objects. Hence the task of constructing a risk object is essentially a 'rhetorical process', which is performed in 'specialised texts' or in public arenas (Lupton 1999:31). For this reason, it often involves intense struggles over meaning, in particular in relation to those actors who are considered to be responsible for defining a risk (for example government authorities). In adopting this perspective, the communication of risks is more than just a struggle over material realities; instead, it rather assumes the face of worldviews, belief systems and moral positions involving issues of cultural

representation as well as political positions. The phenomenological perspective, then, is one side in the spectrum of 'weak constructionism,' its premises are close to propositions favoured by deconstructivists. On the other extreme end we find the position of risk society proponents who take a close realist stance paying less attention to symbolic and interpretative dimensions. Cultural theory, as based in between the two, maintains the continuum. In principle, its premises connect them placing structure and real risks on the one side, symbolic interpretation and individual subjectivity on the other.

According to the discussion above and the insights gained thereof, the following features for a risk conceptualisation are proposed. These are componential features that shape risk perception and action:

1. risk involves *probability* calculations;
2. risk involves application of available, i.e. *imperfect knowledge*;
3. risk is a *cultural phenomenon*: it is value-laden and bound to norms;
4. risk is *socially construed*: it cannot be divorced from personal, experiential, institutional settings within which risks are created and judged.

The features introduced above are strongly interrelated (figure 3.2). They reflect the insights gained over the past decades in risk theorising. *Probability* assessment certainly is an aspect that is constitutive to risk. It implies that human beings can and will make causal connections between actions or events and their consequences. These cause-effect relationships may be scientific, anecdotal, religious, magical, etc., which is to some extent also applicable to comparable concepts like sin or taboo as identified by Douglas. Contrary to popular notions of risk, probability not only has a negative connotation of damage or loss, but equally encompasses both adverse and beneficial outcomes, i.e. opportunities and rewards for a risk-taker. With this statement, it is accepted that human beings were never free of risks, whatever the

conceptualisation was. Humans are not '*homo prudens*' - 'zero-risk man' -, but rather '*homo aleatorius*' - 'dice-man', 'gambling man', 'risk-taking man'. Ironically, at this point the rational actor paradigm is reversed, its close link to agency abolished, and we have to take a fatalistic notion of the world, since "We respond to the promptings of homo aleatorius because we have no choice; life is uncertain" (Adams 1995: 17).

Figure 3.2: Four Componential Features Shape Risk Perception

Risk also implies both the possibility that an event or outcome can happen with the denial that either occurs with predetermined certainty. Risk thus necessarily implies what I shall call an *'imperfect knowledge'* that humans have about the future. The notion of 'imperfect knowledge' enables us to introduce another aspect raised by cultural theorists, namely that individuals and groups have an idea of their future according to their available and accepted knowledge. This knowledge is always incomplete because it is tied to the history and symbols of a culture, especially the construction of nature, and the social fabric of knowledge. Knowledge is central to the concept of risk not only on a group level, but also an inevitable prerequisite for any decision-making for individuals. The construction of knowledge based on a specific rationale therefore, evidently is the reason why the seemingly identical risks are perceived and managed in different ways.

Risks are *normative and descriptive*. Beck as well as Douglas emphasise the point that social groups decide or choose with a specific definition of risks how the world

should be, and what is desired. That what is desired may be negotiated by a group according to available knowledge on the basis of consensus. In Beck's terms this represents the 'ethical implications' of the 'normative horizon', which forms the foundation for the acceptance of risks. However, decisions on risk are *value-laden*, too, they have a moral base. Moral judgements of individuals in their everyday life situations according to their own assessment depend on beliefs, intuition, myths, or advice from friends, family, and so on. While normative regulations have a common validity in society, values have not, they vary but are oriented towards standards accepted in a society.[19] Therefore, these decisions do not always have to be in line with the norms of a group or society, they can be explicitly individual desires according to certain value standards accepted in that specific society (Giddens 1984, Habermas 1984, Weber 1998), often called in risk theory the 'aesthetics' of risk decisions. This does not mean that they are always contradicting existing norms, but rather can be oriented towards them. At the same time the descriptive element comes to light since the risks have to be described, made comprehensible for the members of a respective group (Beck, Douglas). Thus, as especially Douglas points out in her writings, creating group identity and boundaries, justifying action and giving the ground for who and what can and has to be blamed if something 'goes wrong'. It is this symbolically mediated part of the individual's 'ontological security', which is regarded by Giddens as inevitable to cope with the insecurities of life. Blame, on the other hand, gives the basis for what Douglas identifies as the 'forensic aspect' of risk, which is normative as people think it is only fair and just to blame certain people, gods or demons. This discussion may be seen as a sort of summarising of elements of risk especially highlighted in socio-cultural debates of risk.

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[19] Srinivas (1998: 172, 189) explains, while values are 'ideals of conduct', norms are 'rules for behaving'.

III. Conceptual Framework

Having identified the multifaceted parameters of risk, it is now possible to determine the mode of communication, for they may be conceived of being essential coordinates that have to be taken into consideration for risk communication. The theoretical bodies outlined above allow it to bring in a variety of analytical aspects for the theoretical framework. They are to be addressed, and implicit in the conceptualisation. According to most authors, the following dimensions can be identified in the context of risks (e.g. Beck 1992, Caplan 2000b, Coetzee 2002, Douglas 1982 and 1992, Garvin 2001, Giddens 1991, Slovic 1999, Stehr 2001). On a broad level, it encompasses the underpinning processes of modernisation, individualisation and agency, while more specific concepts are:

- Fairness and justice;
- Rationality and knowledge;
- Power and control;
- Trust and credibility;
- Acceptability;
- Blame, and
- Vulnerability.

All these aspects inform the communication of risks in different ways, and I shall refer to them frequently in the following section. Inferring from the argument above, it may be argued that the intrinsic necessity of communicating risks in society and for urban planning in particular becomes evident in the nature of risk as a multi-dimensional or 'polythetic' concept with many meanings, a so called polyseme (Boholm 1996).

3.2 Urban Governance and Risk Communication

3.2.1 Urban Governance for Inclusive Risk Communication

Keeping the above risk conceptualization in mind, the purpose of this section is the integration of risk management in the wider framework of urban development. It has been argued earlier that a rapid increase and interdependence of urbanisation, poverty and risks indicate that most urban authorities in developing countries face many problems in dealing with these challenges. Two aspects appear to be of considerable importance in obstructing successful resolutions to these problems. One relates to existing power relations, whereas another is linked to poor-rich differentials and the resulting distribution of risks within societies. In the words of Ulrich Beck, 'good' and 'bad' are unequally distributed throughout society. The urban governance approach is useful when analysing social and environmental justice in the context of risk mitigation. The four normative goals of the UNCHS (HABITAT) campaign for good urban governance - decentralisation and local participatory democracy, efficiency, equity and security - indicate this (Taylor 2000).

A World Bank Report (2003: 107) argues urban governance relates directly to risk reduction and the communication of risks, if informed constituencies are built to anticipate risks. An appropriate sharing of responsibility and coordination across stakeholders, wide participation in strategic planning and networking among involved actors are considered essential features of the institutional environment. The report recognises that urban areas provide mechanisms for knowledge and learning with the growing intensity of knowledge exchanges arising from globalization and the information technology revolution and on occasions for interpersonal communications. Particularly informal, tacit knowledge, which is important to social relationships, thrives on face-to-face contacts. Also mobilising for action to solve problems (such as urban risks) requires that the stakeholder groups gain access to *credible information* on

consequences, costs and benefits and that they perceive a common interest in finding a solution. Evidently, building an effective constituency is often more difficult where the impacts are uncertain and infrequent, as in disaster mitigation. Therefore, before times of crisis, it should be an objective of institutions to motivate action and share the costs and benefits of preventive measures among citizens in a *fair manner*.

In particular, this World Bank Report also suggests building *knowledge* about urban risks and hazards. Methods such as building institutional capacity, raising the awareness of policy and other decision makers and communities at risk are highlighted as pivotal in reducing risks and to generate a shared understanding of issues at stake: "Without an educated constituency collective decisions on disaster policies are usually dominated by better-off members of the community. Their priorities can differ greatly from those of poor people, who risk larger share of their assets in a disaster" (World Bank Report 2003: 113-16). From this viewpoint it is essential to accept that as a concept, urban governance recognises the existence of power inside and outside the formal authority of government (Taylor 2000: 199). Nonetheless, in practice, Riley and Wakely (2003: 11) remark that the need for government officers to change the way they relate to and communicate with other actors is especially urgent where policy seeks residents' participation and partnership with the aim of empowerment and social inclusion.

Figure 3.3:
Conceptual Framework – Risk Communication in Urban Governance

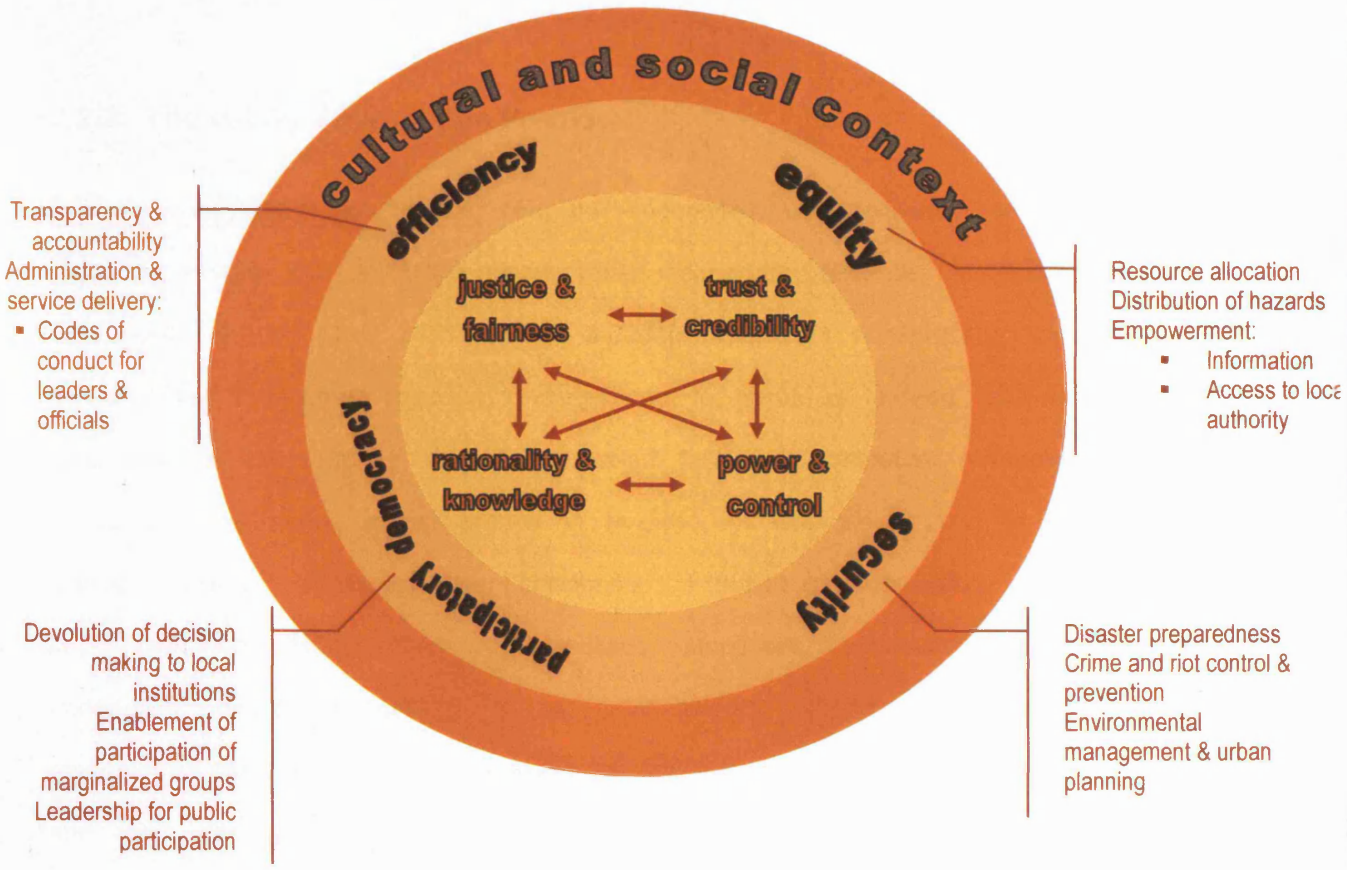


Figure 3.3 illustrates the integrated framework developed to communicate in urban governance. The conceptual framework makes clear that communication does not take place in a cultural and social vacuum. It is for this reason that the four pillars of inclusive urban governance, participatory democracy, efficiency, equity and security must be viewed as processes which happen in such a context. Likewise, the four major building blocks presented in the centre of the diagram represent conceptual notions identified as pivotal in the fields of 'risk' as well as 'communication'. These are understood as interdependently linked, cross-cutting issues in good urban governance. Hence the figure is an abstracted and condensed display of the

conceptual framework of this study. The premises of this approach are specifically outlined in the subsequent paragraphs.

3.2.2 The Urban Governance Framework

Efficiency in urban governance can be understood as processes and institutions producing results that meet the needs while making the best use of resources (Van Etten and van den Dool 2001: 24). It therefore relates to administration and service delivery like transparent financial management. In terms of service delivery efficient investment in infrastructure may be achieved through participatory strategic planning to address the needs of all groups in society. An example of this is the Report Cards, a method to assess user satisfaction of public services which is also used in Ahmedabad. Transparency encompasses processes, institutions and sufficient information directly accessible to all stakeholders to understand and monitor governance processes. Decision makers in government authorities, the private sector and civil society organisations are accountable to the public as well as to institutional stakeholders. Accountability is about power, about people having not just a say in official decisions but also the right to hold their rulers accountable, they can demand answers about decisions and actions (Human Development Report 2002: 65).

Equity in urban governance can be supported through all men and women having opportunities to improve or maintain their wellbeing. On the positive side, equity comprises resource allocation and empowerment (Taylor 2000). While on the negative side it includes the distribution of hazards among city dwellers, which relates it to the twin concept of social justice and procedural fairness of communication. In this study, an emphasis is given to equity of access to decision making processes and the basic necessities of urban life. In participatory development communication,

communication is used as an empowerment tool for facilitating community participation in a development initiative (Van Etten and van den Dool 2001: 24, Bessette 2004: 7-8). Thus development communication becomes a planned activity based on participatory processes, media and interpersonal communication, which facilitates a dialogue among various stakeholders in order to implement a set of activities to improve people's lives.

In the urban governance framework security explicitly highlights the significance for risk mitigation. On the one hand, security refers directly to environmental management, disaster preparedness and crime control (Taylor 2000). While on the other it refers to security of individuals and their living environment (Van Etten and van den Dool 2001, 25). This latter aspect became more perilous in Ahmedabad where the communalisation of society has recently increased segregation of local neighbourhoods, hence adding to the environmental risks that already prevail.

Prerequisites for participation are decentralisation and local democracy in urban governance. The Human Development Report (2002: 51 ff.) argues from a human development perspective that good governance is democratic governance. With reference to communication, this essentially includes:

1. people having a say in decisions that affect their lives,
2. people being able to hold decision makers accountable,
3. inclusive and fair rules, institutions and practices that govern social interactions,
4. gender equity in decision making in private and public spheres,
5. policies that are responsive to people's aspirations,
6. respect of people's rights and freedoms, and allowing them to live in dignity.

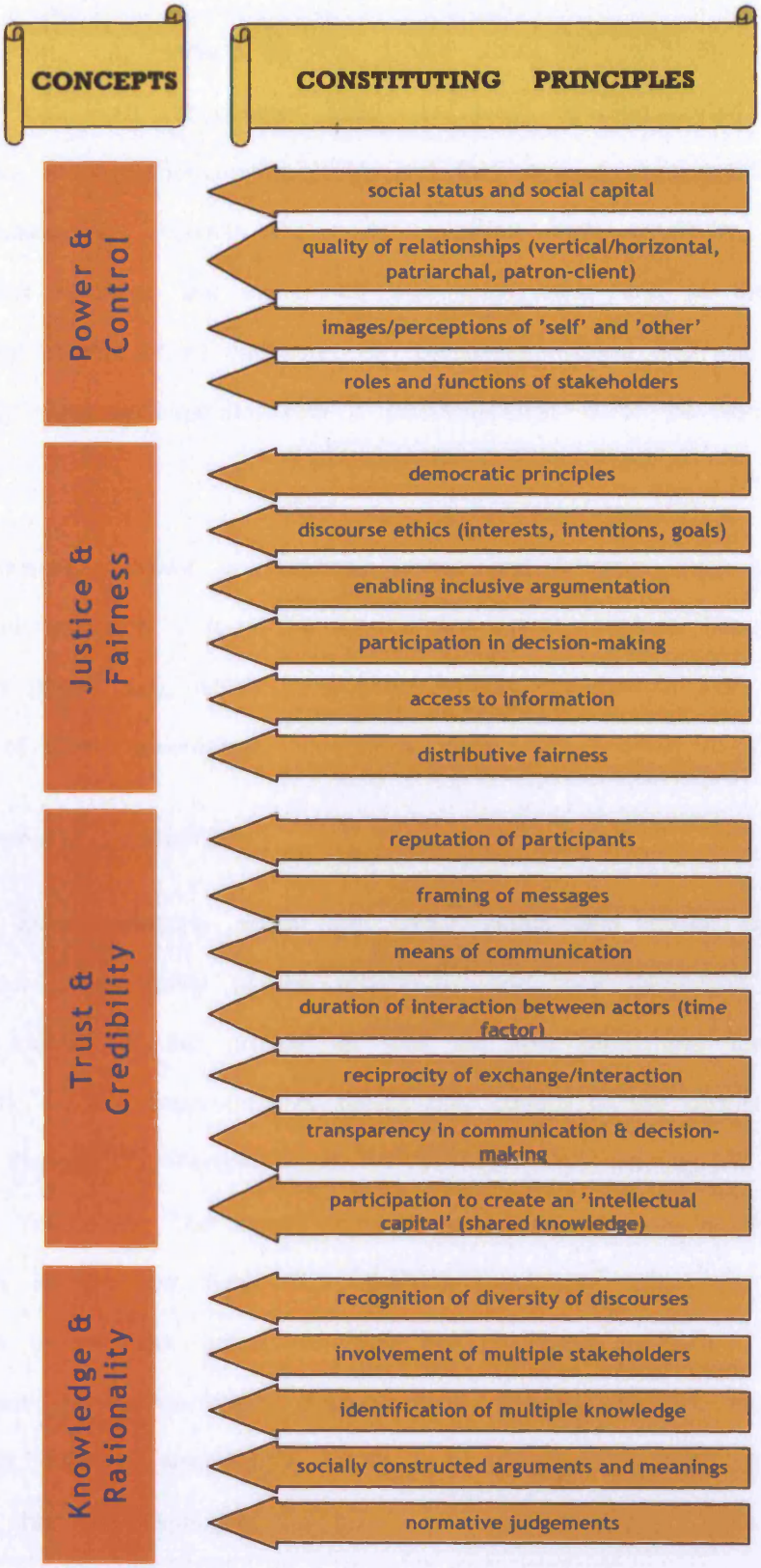
This dimension of the urban governance framework is the most fundamental one, for it cuts across the others. The notion of participation is at the heart of good governance, as it promotes collective as well as individual agency, thereby expanding human choices. More participatory governance can be more equitable as well, even though it is well known that often the potential beneficiaries lack political power. Since participation involves engaging in deliberative processes it can bring people's concern to the fore and open space for free debate which makes decision-making work. Bessette (2004: 11) points out that democracy implies recognising other people's right to exist, to have their own point of view, and to express them freely and peacefully without intimidating others. Integrating it with communication, he contends that "[...] there is a consensus today on the need for grassroots participation in development and on the essential role that communication plays in promoting development. [...]. *Participation*, by putting the emphasis on the needs and the viewpoints of the individuals and groups, *becomes the key concept of development communication* (Bessette 2004: 61; emphasis added)."

Urban governance can be regarded as a concept which attempts to reflect the nature of institutional transformation at local level to include all citizens in decision-making processes: "Inclusive cities (or socially sustainable cities) are, therefore, cities in which all citizens are incorporated in decisions and policies; none, in particular, the poorest and most vulnerable, are left out" (Stren 2001: 11). As such, the notion of government has to be broadened to include new actors that provide an increasingly important contribution to the management of urban areas. This approach focuses on the nature of the relationship among actors in the urban arena. Central to this notion is a dichotomous distinction of the relationship between state and society (Corubolo 1999).

Significantly, urban governance provides a qualitative explanation of urban reality by aiming at institutional development on the basis of the necessity to re-aggregate the fragmented institutional landscape around a policy and management discourse: "This sensitivity to the political dimension of social relations entails a shift from the technical role of planners and managers towards a more active involvement in the system of power relations through a *communicative and interpretative process of mediation and negotiation*" (Corubolo 1999: 20, emphasis added). Healey's institutionalist approach of collaborative planning focuses on the relational webs or networks in which we live our lives. These social networks overlap and intersect in many and complex ways. They are structured and framed by 'taken-for-granted' power relations, which are continually re-negotiated and re-structured. The last aspect can be taken as a prerequisite for the possibility that the 'way things are' could be changed into something different. In this sense, governance processes themselves generate relational networks that may cut across and interlink the relational webs.

Urban governance understood in this way, then, is about building an enabling atmosphere in which 'inclusionary argumentation' is possible. Decisions are not any more based on adversarial argument, but on collaborative argumentation beginning with what issues are, the different ways they may be understood and what possibilities for action there may be. Moreover, this is linked to a process of mutual learning about the concerns of others, paying attention to the range of ways people have of knowing and valuing things and the cultural underpinnings of knowing and valuing. Interactive approaches to strategy-making are ways of deciding that are actively produced in social contexts. The central question posed refers as to how maximum participation can be ensured, which in turn raises the question of resources and access to these.

Figure 3.4: The Four Twin Concepts in Risk Communication



3.2.3 The Conceptual Interface: The Four Twin Concepts

There are several key aspects in the debate about risk and its communication, which appear throughout this chapter. They have been identified earlier on as crucial in the analysis of the phenomenon 'risk', and they are of considerable significance for communication, too. Aspects like power relations, trust, credibility, reputation of participants and emotions are intertwined with each other and at the same time form the social context of all communication processes. Ethical and normative notions and standards play an important role if communication is to be socially fair and just.

The twin concepts - power and control, justice and fairness, trust and credibility, knowledge and rationality - form the explicit conceptual interface between risk and communication (figure 3.3), which have been brought together in this section under the umbrella of urban governance (figure 3.4).

3.2.3.1 Power and Control

This section asks questions about the social status and social capital of the respective actors, the quality of the relationship and their interaction, the external and internal identity of the groups as well as their roles and functions. Many authors remark on the importance of power and control in the distribution of risks (e.g. Beck, Douglas, O'Riordan) and in interactive (communicative) relationships (Schirato and Yell 2000). The insight that risk is a political issue is also shared by most scholars in the risk field. This element specifically takes into consideration power politics in the risk arena, whereas the conception of power is the most criticised element in communicative planning theory (Alexander 2001, Mc Guirk 2001, Flyvbjerg 1996, Yiftachel and Huxley 2000). In a response to that critique Forester (2000) states that one aspect of the power of communicative accounts is that they

enable the analysis of ideologising, exaggeration, falsehood, the manipulation of information and selective misrepresentations. Communicative theory can thus help to distinguish enabling from disenabling practices in real settings. This is expressed in the concern of communicative theories with normative issues of exclusion and inclusion, of misrepresentation and justification and the manipulation of trust or reciprocity.

Foucault's (2002) approach, on the other hand, is valuable because he draws an explicit link between knowledge and power in discourse through the study of language and meaning. It lays emphasis on the deconstruction of discourses which helps to appreciate hidden values and understandings and what is communicated in a social situation. Particularly it provides an understanding of the hidden systems of power relations which are embedded in the 'finegrain' of social interactions (Healey 1996). Knowledge is a discourse built through particular systems of rationality in which power takes effect through the ability to define what accepted knowledge is. It is accorded the authoritative status of truth. According to Foucault "the production of knowledge is therefore an effect of the exercise of power" (Mc Guirk 2001: 207). Power, knowledge and rationality constitute a nexus in which power relations are effected through a rationality which drives the social production of knowledge. In planning practice, effects of power are carried through the discourses, strategies, and techniques which arise from and reinforce dominant knowledge and rationality forms. Thus, the acceptance of alternative forms of knowledge as compared to the dominant scientific knowledge is necessarily linked to a rethinking in the standards of policy and decision making procedures and the underlying rationale. Seen from this perspective, such a reorientation almost inevitably involves or causes institutional changes necessary to accommodate these new circumstances.

Such an approach means basically the creation of a shared-power world. Power, in this conceptualisation, is much more than that manifest in the overt interplay of interests. It is a property of society or the social community meaning the 'capability to make a difference', and therefore it includes the exercise of power. This process is likely to create conflicts in communication. As Brown and Ashman emphasise, "When parties of unequal power have different interests, we would expect some disagreements in the formulation and implementation of programs that affect those interests. The absence of conflict raises questions about the extent to which mutual influence exists in such relationships" (cited in Riley and Wakely 2003: 15). For communication processes, identity based on age, sex, ethnicity, religion, caste, and so on always matters. It is significant for inclusive communication to identify the groups which are involved as well as those that are excluded and on what grounds. Identity influences the communities to which we belong, status, needs, and interests, and thus the way people relate to others (Riley and Wakely 2003: 16).

Power has often been conceptualised as being held by individuals or groups on the basis of their membership of a particular formal or informal institution. But this is only part of this phenomenon. Power is also generated and distributed in the form of relations between individuals and groups. While it is true that the Weberian understanding of power by social status on the grounds of membership of a group by birth may result in inclusion or exclusion to access and control of certain resources, inclusive communication should encourage all stakeholders to support strategies of social change "which aim at opening up relational links and challenging exclusionary ones where these reinforce inequality" (Healey 1997: 118). To take part in a discourse and then to participate in decision making is power in the Foucauldian sense. Such kind of power represents the influence a discourse has as a form of coercive truth finding on socially accepted types of knowledge and therefore on social conditions (Beckmann 1997: 41). If excluded groups or individuals

are able to expand their communicative relations within a society, they will be better able to enter a discourse arena whereby their arguments are the exertion of their power. Consequently it is through the richness and availability of social networks and interaction that people expand their access to resources.

3.2.3.2 Justice and Fairness

The twin of justice and fairness relates to the practices of democratic principles, the use of discourse ethics, to what extent inclusive argumentation and participation in decision-making are practiced, and lastly the access to information and distributive fairness of risks.

Social justice has emerged as one of the major concepts within efforts of urban governance and communication equally. In India, social justice to upgrade slums has gained legal backing through the 74th Constitutional Amendment Act (Section 12, Article 24wwa) including "preparations of plans for economic development and social justice" (cited from Acharya and Parekh 2002: 344). In terms of communication it refers to the deployment of fair and accepted methods of social interaction, based on what is judged as right or wrong by the stakeholders. To include this notion of social justice into the concept of communication implies to project a horizontal rather than hierarchical composition of communicative relationships. Iris Young (1990) offers a helpful complementary approach to justice. She emphasizes that justice cannot merely be conceived of in economic terms (material aspects of life), but equally includes the area of social relations such as power, opportunities, and access to the political system. Hence she underlines that justice as distribution contains elements of an institutional nature insofar as it incorporates the capacity of individuals to exercise their capacities, and ultimately to have access to material-economic resources.

III. Conceptual Framework

Amartya Sen´s (2000) notion of freedom and justice may drive this point to further precision. With him it is possible to connect communication rationale with the concept of justice as he deals with it regarding the process of decision-making. His development of the concept of freedom as seen in the form of "individual capabilities to do things that a person has reason to value" (Sen 2000: 56) recalls Young´s approach. It can thus be utilized as a justification to further explore communication considering justice in decision-making processes. Sen highlights the 'informational base' available to a decision maker and the viewpoint this person takes, by saying that evaluative judgements have a select informational basis. He maintains this process is characterised by 'informational exclusions', i.e. certain information is put aside without being considered and hence does not have a direct influence on the decision. The character of the approach, this is crucial, may be strongly influenced by insensitivity to the excluded information. Accordingly, a theory of justice can be understood from its informational base, for what information is - or is not - used is to be directly relevant.

In this respect Sen approximates Habermas´ notion of communication in public debating to achieve social justice in the light of one's freedom. Habermas too offers an alternative approach, which is aimed at broadening the informational base by redefining the rationale of validity claims. Consequently, Sen´s 'capability approach' is explicitly pluralist in nature. Capability, as understood in this notion is a kind of freedom to choose; as such it may also be translated into assets to enter a discourse arena. Ultimately, the previously outlined normative dimensions interrelate with the availability and accessibility of assets -represented in social networks, financial background, housing, etc.- and various types of capital -social, economic, symbolic- which enable stakeholders to participate in a discourse in order to influence that very space where decisions are made. On one hand, these assets determine who has power and control over various processes including

communication, whereas on the other hand the normative framework may open up opportunities to access assets and generate capital, which in turn allows people to participate in public debate.

Fairness and justice are concepts which may be conceived of as inevitable elements of democratic risk communication processes. However, these concepts are normative goals. A democratic risk communication model should be governed by rules that guarantee a just and fair process where all parties are supposed to have a maximum participation and decision-making power. Particularly for governmental bodies methods of persuasion could be detrimental to the cause because the aim of communication is an understanding and not the exertion of power (Fischer 1996, Gutteling and Wiegman 1996).

Ethical problems can play a role when intentions of the communicating agents differ from each other. The effectiveness of risk communication can be disturbed by the goals of sources and receivers of messages. Apart from the lack of consistency of information needs and information supply, the discrepancy of communication goals could be a valid explanation for the rejection of risk communication messages. Covert intentions of participants in communication processes, what Habermas (1984) calls the 'rhetorics', thus are not only an ethical issue but are likely to cause disruption of trust and credibility.

Habermas' notion of discourse ethics is useful in forming a framework for the fair communication of risks. It is characterised by an inclusionary principle that all participants who have a stake are enabled to articulate themselves to make the procedure itself socially more just (Healey 1992). Central to this understanding is the recognition of other people's values, and through debate learn to regenerate a common set of (new) values and meanings. Hence the focus of risk communication

on citizen's evaluations of the political process including people's values concerning procedural fairness, the manner in which judgements and decisions in a society are made, and distributive fairness as to how fair risks and benefits are distributed across different groups in a society (Gütteling and Wiegman 1996).

3.2.3.3 Trust and Credibility

Six major principles constitute this twin concept, namely the reputation of participants, framing of messages, means of communication, duration of interaction between actors, reciprocity of exchange and transparency in communication. Trust is perhaps the most crucial dimension in communication processes, there is virtually no publication that does not highlight its importance. General trustworthiness in a society can be strong either because of strong personal networks or because of good laws and a functioning judicial system rendering social capital and institutions sometimes indistinguishable (World Bank 2003: 38). As societies become more complex, trust in individuals - which is generated by knowledge of the character and frequency of interpersonal contacts - is increasingly supplemented by trust in institutions - rules and organisations - when dealing with strangers.

One crucial element is that trust is substantially made up of the time over which relationships last. Trust is developed over time through communication, information sharing, experience, self-organisation and self-transformation (Riley and Wakely 2003: 89). Common ground for trust also exists and can be formed when the agents are familiar with each other and know each other, to which identity and same group membership certainly contribute. Transparency of actors is another dimension which links it to the urban governance framework. Many authorities in developing countries are subject to a high degree of suspicion and mistrust from marginalised groups who have been repeatedly betrayed. By listening, and by responding in ways that show that they have heard, governments and other stakeholders alike increase the

chances that they will earn the trust of marginalised groups. Trust is important to the poor as they select, apply and adapt the knowledge most appropriate to their circumstances (World Bank Report 2003: 118). In partnerships, empowering participatory processes and networks, trust is the mechanism that holds these relationships together and characterises them as cooperative. Information sharing is significant to creating a climate of trust. In this the framing of messages and means of communication are crucial elements contributing to their credibility. Much depends on language to which belong the words, timing, format, tone, place, and so forth. All this is interpreted and may or may not appear trustworthy and credible according to these circumstances.

Participatory processes, despite their often as time-consuming characterised procedures, have the essential advantage that they bring to the fore the hidden and very real dangers concealing behind technocratic generalisations of technical risk assessment. Hence, by considering the contextual factors, the process itself helps to build both credibility and acceptance of research findings. A reluctance to take these factors into account is frequently greeted with public distrust, since legitimacy of the values and anxieties that arise from the social context are denied: "[...] those who seek to regulate risk seriously jeopardise their own credibility by saying to people that their social experiences and searches for meaning do not count" (Fischer 1996: 492). Apparently, the context in which communication occurs provides additional information for the actors to generate interest in a risk message, e.g. aspects of the message source such as credibility, reputation, trust and social attractiveness are important for the adoption by receivers (Jaeger et al. 2001: 132).

Trust, like risk perception, correlates with gender, worldviews and affect. Both aspects - trust and credibility - are essential for a successful communication process: "The limited effectiveness of risk-communication efforts can be attributed to the lack of

trust. [...] If trust is lacking, no form or process of communication will be satisfactory" (Slovic 1999: 697). In dissolving distrust and promoting credibility especially of scientists and government officials with communities, a transparent communication and decision-making process is crucial. An open dialogue about the meaning of information, its accuracy and its implications is a way in creating 'intellectual capital', or shared knowledge, among various actors (Innes 1998). This in turn, leads to a much higher acceptance of any decisions that are made.

The aforementioned aspects are easier said than put into practice, since the crux with trust is its inherent fragility. It is more easily destroyed than created, and typically the process of creation tends to be slow. Slovic (1999) lists some important psychological features why a trustworthy atmosphere in a risk communication context is so hard to build. The first reason is that negative (trust-destroying) events are more visible or noticeable than positive (trust-building) events. This goes hand in hand with the second aspect which says that negative events carry much greater weight than positive ones. A third one is the fact that sources of bad news tend to be seen as more credible than sources of good news. Slovic ascribes all these factors to the so called 'asymmetry principle', where the playing field is tilted toward distrust. One major reason for such an environment is the news media which report much of the bad news. Another is the rise of powerful organisations and lobby groups in the risk arena who dominate the risk debates with their own experts and communicate their distrust to the public to influence risk policies. Thus an adversarial discourse emerges that puts expert against expert and produces contradicting results which further destroy trust and credibility.

Obviously, a notion of ethical discourse appears much more suitable in creating trust than competitive arenas with their emphasis on adversarial relationships. Moral and ethical values and standards are therefore inevitable for communication processes,

particularly if they are addressed to poor people who lack assets and resources to enter a risk arena.

3.2.3.4 Knowledge and Rationality

Knowledge and rationality combines five principles, notably the recognition of the diversity of discourses, involvement of multiple stakeholders, identification of multiple knowledge, socially constructed arguments and normative judgements. A few years ago, a World Bank Report (1998/99:117) noted that people who work in the development sector and in developing country governments recognise that there is a knowledge gap between them and the poor, that there is much knowledge that the poor do not possess. In eagerness to give them this knowledge, they forget that the poor do have their own knowledge, which is not even known to many outsiders. This local knowledge and the information of specific situations and conditions are crucial for their development. Recognition of the diversity of knowledge and rationalities, and listening to it is pivotal in communication for development.

Knowledge and rationality is perhaps the most critical and contested dimension in risk communication, for the nature of the phenomenon 'risk' forces us to admit all risk assessment is subjective. It is a blending of science and judgement including psychological, social, cultural and political factors. Risk knowledge is heavily linked to control and power because whoever controls the definition of risk controls the rational solution to the problem, "defining risk is thus an exercise in power" (Slovic 1999: 689). This is what makes knowledge and information, the access to them and the articulation so important; knowledge is culturally produced and therefore contested. At this point 'local knowledge' - designating the boundedness to a specific group (Schultze 1998) - of different actors and particularly of poor communities becomes significant because the players in different arenas like 'the public', 'the scientists' or 'the policy makers' all use different languages, have their own discourses and

agreed-upon conventions for identifying knowledge and constructing arguments. Under such circumstances each actor perceives the other as being either 'culturally illiterate' or irrational or maybe even both (Douglas 1992, Garvin 2001).

Communicative planning, while recognising the variety of meanings, languages used and lifeworlds, is a way of empowering people in taking part in decision-making as it acknowledges different ways of reasoning. Knowledge is not confined to scientifically generated knowledge, but rather comprises myths, narratives, stories, and reflects worldviews. The notion of communicative rationality accepts the social construction of meaning, the social embeddedness of ways of thinking and acting in varied discourse communities and the interpretive nature of the world. Such an understanding of rationality allows an application in varied cultural systems of meaning (Healey 1992, 1996).

The production of knowledge is bound to the concept of its underpinning rationality. An argument founded on instrumental rationality is based on the induction of empirical evidence presented in a logical and consistent way; most messages concerning hazardous technologies focus on 'low probability' and 'high consequence risks'. Usually, arguments which mainly address probability of certain consequences occurring are considered to be rational because they present empirical evidence in form of statistical information. An alternative option is emotional (pathos) arguments addressing the feelings, values, or emotions of a receiver, and they focus mainly on the consequences of hazardous activities (Gutteling and Wiegman 1996).

It is now generally accepted that knowledge under premises of instrumental rationality, as it is normally produced in science, is a construction too. Scientific knowledge is not produced in a social vacuum but rather is influenced by other scientists, actions and cultures of non-scientists. Thus normative questions always

underlie technical analysis. No process of empirical measurement, data collection and mathematical analysis takes place without crucial normative judgements. These aspects of normative and social judgement must be viewed as an inherent part of scientific risk assessment. Yet still the understanding of the relation of technical languages to public normative languages, namely that public debates proceed more like social narratives than as formal inferential logics is often ignored. Public narrative language encompasses partially formal logic, but in structure they are more like stories grounded in questions revolving around motivations and values of political actors and technical experts. These are exactly the concerns that risk assessors have failed to evaluate and integrate in their approach (Fischer 1996).

Garvin (2001) explores the different role for knowledge in various rationalities relevant in policy making. She identifies three major theoretical and practical shifts in policy analysis since its inception in post-war Western industrialised countries. The first one is the well-known rational actor paradigm, which was followed by Lindblom's incremental rationality of 'muddling through'. A contemporary notion is the one of 'participatory' policy making with its consultative approach to problem solving including public participation in decision making and increased responses to public concerns. The construction of knowledge becomes manifest in each perspective in very different ways: "In the first approach, knowledge is scientific and closely linked to traditional, idealized conceptions of truth seeking for objective facts. It is linked to rationality and modernism. In the second approach, knowledge is relative, partial, and used to sanction the use (and, sometimes, abuse) of power. This approach includes the inference that knowledge is a tool used by policy makers as the capricious means to a political end. In the third approach, knowledge is contextual and instrumental - knowledge is accepted as being partial and becomes one of many tools to validate socially acceptable policy options rather than immutable, extant truth or a pawn in a power struggle" (Garvin 2001: 448).

III. Conceptual Framework

Socially acceptable policy options responding to risks require a specific rationality of acceptance or 'disapproval' of decisions or innovations by a group or individuals. Persuasion, adoption or rejection occurs at the level of interaction, and it is there that interests can explain why a statement, a set of ideas, or a practice are accepted or rejected. Since interests are symbolically interpreted and not simply material data, they consist of particular combinations of items of a cultural system (Galjart 1993: 19, 23). The adoption of an innovation always implies both costs and rewards (in risk terminology 'adverse effects' and 'benefits'). Both comprise material and immaterial dimensions as well, as for instance pointed out by Tripathi about the increase of people's social reputation and self-esteem after completion of the slum networking programme in some areas of Ahmedabad: "The expected approval, or the criticism, gossip, even witchcraft of others, enter into individual weighing up of costs and rewards. Risks depend not only on the vagaries of the weather, or on relative prices, but also on the likelihood that a contracting party will uphold his part of the bargain, thus on the relationship of trust" (Tripathi 1998). It sounds almost too banal, but a positive attitude towards (social) change depends entirely on the rationale of that change.

A new approach to risk management must take into account a wider range of stakeholders in the initial discussions of what the risk problem is, i.e. integration into the search for risks (definition), prioritisation and meaningful measurement. It is even more critical to recognise the social dimension and bring in social actors in the process of searching for and identifying risks once it is accepted that the process itself is a fundamental source of risk. The concrete knowledge of these social actors is of critical importance in the search for alternative sources of and reactions to risks (Fischer 1996).

3.2.4 Institutional Change for Inclusive Risk Communication

Institutional change has been identified as a key element in urban governance. In addition, institutions and organisations themselves may be very real causes for the production of any type of risk, for they have a crucial influence in shaping risk and risk debates.

Institutions can be seen as the overall framework which contains the above outlined twin concepts. Especially 'protective institutions' (World Bank Report 2003: 41) that define and control rights in terms of access to and use of assets are central to human well-being. The institutional set up thereby is crucial for who controls what and who is able to take part in processes of decision making. In other words, institutions determine the degree and exertion of the twin concepts. The World Development Report (World Bank 2003: 37-38) defines institutions as the rules and organisations, including informal and formal norms that coordinate human behaviour. Since communication has been identified in the theoretical approach as a socio-cultural phenomenon, it takes place in the framework of such institutions. In a modern state, usually formal institutions such as regulations and laws are prevalent, but it is clear that without informal institutions communication would not be possible. The latter are based on norms, rules and traditions, which encompass trust and shared values as part of social capital.

Social capital, importantly, can comprise norms and social networks if they have empowering (inclusive) character. Communication therefore takes place according to certain norms and values through institutions. However, in spite of the currently fashionable partnership and governance approach in development, such values and principles of communication - as coordinating human behaviour - are usually not considered by the interacting stakeholders. Consequently, it is very important here to identify desirable values that should frame communication processes. This has been

done in terms of the four twin concepts in the conceptual framework. Institutions may be positively utilised for sustainable and equitable development when they are inclusive and enable people to work with each other in order to reduce risks.

3.2.5 Community and Communication

Although the connection between community and communication should be apparent, it often seems to be forgotten. Yet it is crucial in that it connects the 'culture of communication' to a specifically defined social group. In fact from a linguistic point of view the two concepts are mutually inherent, as Kumar notes: "The English word 'communication' is derived from the Latin noun 'communis' and the Latin verb 'communicare' which means 'to make common'. Terms closely related to communication and with similar etymological origins include community, communion, commonality, communalism and communism" (Kumar 2001: 1). While the term community has been conceptualised in many different ways, in Ahmedabad it is broadly used by NGO workers, government officials and other professionals with reference to slum settlements for a spatial unit like 'the community in Nitinagar' or very general 'the slum community/ies'. As the term is highly context specific, community can also refer to many different social and cultural layers such as religious communities, castes and ethnic identity groups. I used 'community' with both meanings, spatially for the two case study areas as well as with its cultural connotation. This is justified in so far as the two slum pockets both show a relative homogeneity in terms of caste belonging and faith, thus displaying a convergence with the cultural concept of a community which shares certain norms and values (see Madrid 2002).

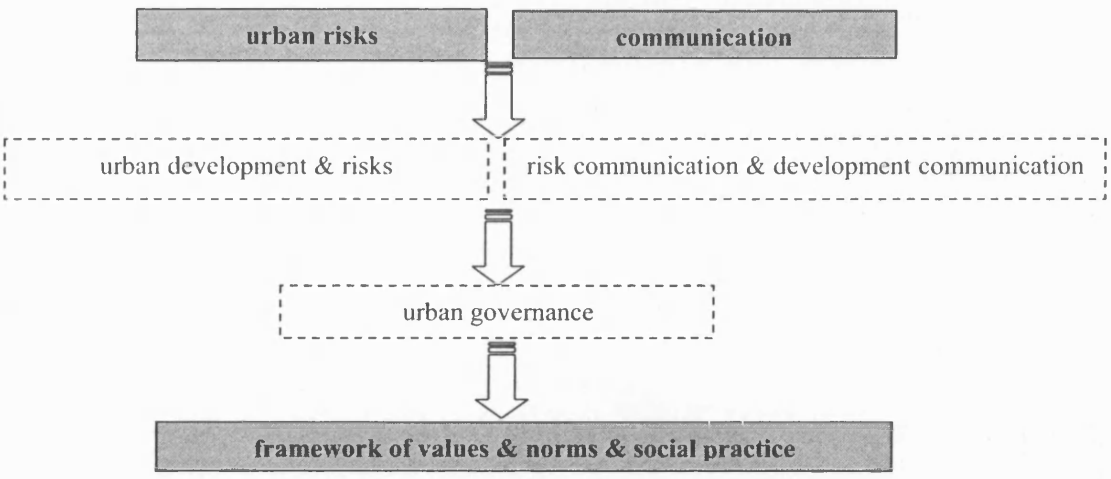
The concept of community implies the existence of ties between people, with these ties being sufficiently strong to motivate individuals to act for the good of the

collective rather than just the self. Relationships, networks and community structures are commonly referred to as social capital, i.e. networks of association and relationship, mutual trust, and norms of reciprocity that support cooperative problem solving (Riley and Wakely 2003: 13). While community may be spatially defined, its networks can stretch far beyond a location to reach out across the city. Madrid (2002: 56) remarks, "[i]ncreasingly, social support is seen as a fundamental interpersonal communication process occurring within the structures of people's relationships and life events [...]." In other words, the concept of communication implies the concept of community. If this is true, it may be argued that discourse communities can be created in order to generate 'commonality' for the purpose of communicating certain issues such as risks.

3.3 Conclusions

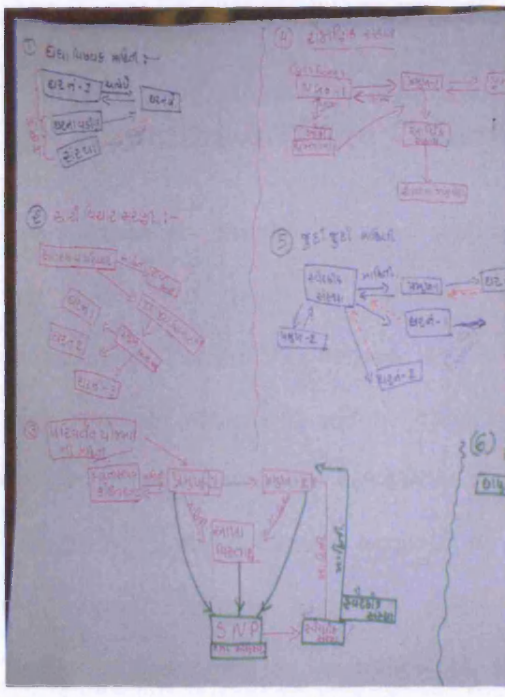
Vantage point of this chapter was an introduction into the specific circumstances conditioning the links between three key aspects relevant for this research, urban risks, the poor and risk communication (as discussed in Chapter I).

Figure 3.5: Theoretical Foundations of the Conceptual Framework



III. Conceptual Framework

The theoretical foundations and their links, as they have been discussed and outlined in this chapter, are shown in figure 3.5. The framework has been developed in such a way that an analysis of risk communication in urban settlements can be conducted by taking into account factors of social practice, values and norms. The synthesis of theoretical approaches of risk perception and communicative theories as mainly derived from anthropological and planning theory gives form to a conceptual framework which is able to provide a comprehensible approach to the analysis of risk communication in urban areas between poor communities and municipal authorities. Hence the derivative framework puts an emphasis on socio-cultural processes and mechanisms of urban risks, risk communication and urban planning to offer a complementary approach to the currently still prevalent notions of technical risk analysis, management and risk communication. This kind of 'unconventional' risk communication is for the first time explicitly set in the context of urban development planning.



Chapter IV

Research Methodology

"One woman did not come inside the house because two of the elder men were sitting there. She would not be able to sit without covering her face. I repeatedly invited her saying "*andar aao...andar aao*" [Gujarati: come in] till I found out what the reason was. She pointed at the two men, and everyone started laughing. Although this dimension of gender relationship was highlighted as an 'obstacle' by the residents in the very first session I ever had with them, people strictly comply with this social norm. Later I repeated the same mistake when I called one man to enter, he grinned pointing at this woman who now sat inside!! This time it was him who had to stay out" (Notes on participatory workshop from my field diary)

IV. Research Methodology

4.1 Remarks on Data Collection and Analysis

Every research project requires appropriate research methods and techniques. In this case the core of primary data collection is based on fieldwork in Ahmedabad, which is framed by additional published and unpublished material from various sources within India. In agreement with the objectives of the research the *qualitative research paradigm* is considered as most appropriate. Especially, anthropological approaches to fieldwork allow for a flexible operation with these methods and are open for alteration during the research process. Table 4.1 provides an overview of study populations and what is considered to be an appropriate combination of anthropological and social science research tools.

Table 4.1 : Research Tools and Purpose

Method	Purpose
Semi-structured and informal interviews with slum dwellers	▪ Identification of risks and people's perception ▪ discussion of daily life in slum
(Participant) Observation	▪ one-week-stay to observe and take part in life of Meladinagar to contextualise people's activities and their statements in interviews
Semi-and un-structured interviews with officials, NGOs, professionals	▪ in total 24 interviews ▪ AMC officers: to understand AMC's organisational structure, it's position regarding SNP, public private partnerships, and view of urban risk management ▪ NGOs and other professionals: examination of their role in communication processes and outsider perspectives
Participatory workshops in two selected slum areas	▪ Three one-day sessions in each slum area ▪ gain information on people's risk perceptions and communicative environment ▪ observe and discuss intra-group dynamics

Quantitative data collection to support data obtained through qualitative methods has not been deployed at first hand. There are incomplete sets of survey data which were gathered for the slum networking programme by FPI/UPP.

Theoretically, both approaches can be regarded as complementary, with triangulation enhancing the reliability, validity and depth of data. Triangulation is seen here as "[...] a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (Stake 2000: 97). Whilst acknowledging that no observation or interpretation is perfectly repeatable, triangulation serves also to clarify meaning by identifying different ways in which a phenomenon is observed. So, triangulating qualitative with only quantitative data is not inevitable, it can also be achieved by using various qualitative tools.

In the subsequent sections I will reveal my approach to the research strategy in greater detail, proceeding further to the selection criteria for the study population, the construction of research questions and the interview guides, how the fieldwork itself was conducted to finally conclude with the methods used for interpretation of the data.

4.2 Methodological Framework of the Research Strategy

Similar to building a conceptual framework, a methodological framework is needed to simultaneously locate in sociological research and relate to theoretical premises. Accordingly, it is necessary to briefly outline the *epistemological orientation of the research*. I shall first describe the type of research strategy, and second the background against which data was collected and analysed. Usually a distinction is made between inductive and deductive approaches of inquiry. Yet in the recent past attempts have been made to reconcile these seemingly contradicting notions by combining them, known as a *retro-deductive* approach (Blaikie 1993: 156-59). Inductive research is principally based on empirically generated facts and observations, while deduction builds on a hypothetical assumption. Following this insight, this thesis takes advantage of merging them in a cyclic and iterative process in a non-rigid but dynamic way (Bouma and Atkinson 1995: 9).

The research is inspired by action research in its formulation and implementation, taking into consideration a notion of collaborative fieldwork: "[...] action research is a participatory, democratic process concerned with developing practical knowing in pursuit of worthwhile human purposes [...]. It seeks to bring together action and reflection, theory and practice, in participation with others [...]" (Reason and Bradbury 2001: 1). Such a proposition has clear ethical implications.[20] Collaborative anthropology (Lassiter 2001) and action research, as such, challenge the conventional way of knowledge-making and aims at creating a shift in the balance of power in favour of poor and marginalised groups in society. Using a collaborative perspective of doing research also attempts to overcome this shortcoming (Reason and Bradbury 2001: 6, 9). In agreement with the critique outlined in Chapter II, action research corresponds as a worldview[21] and as a methodological approach with the ethos of risk communication. This approach carries the highly ambitious intention of creating social justice, since "[...] the primary purpose of action research is not to produce academic theories based on action; nor to produce theories about action; nor to produce theoretical or empirical knowledge that can be applied in action; but to liberate the human body, mind and spirit in the search for a better, freer world" (Reason and Bradbury 2001: 2).

So it is of no surprise for the reader that scholars established a direct link between this approach and Habermas' theory of communicative action. Indicating a convergence of this research topic with the research ethics and methodology as presented in this chapter, there exists a connection of 'communication as a methodological problem and a research topic'. One author goes on to remark: "It

[20] I refer to this in 'Ethics in Fieldwork' in Appendix 3.1.

[21] The authors label this worldview as participatory: "The emergent worldview has been described as systemic, holistic, relational, feminine, experiential, but its defining characteristic is that it is participatory [...]. The participative metaphor is particularly apt for action research, because as we participate in creating our world we are already embodied and breathing beings who are necessarily acting - and this draws us to consider how to judge the quality of our action." (Reason and Bradbury 2001: 6-7, original emphasis).

seemed to me that critical action research could help to create the circumstances in which communicative action among those involved could be encouraged, enabled, sustained and made generative in terms of personal, social and cultural development in and around the setting" (Kemmis 2001: 98).

Such a research tool is equally understood as a powerful method for social and institutional change, simultaneously encompassing research methodology and development planning objectives. This became evident during the implementation of the participatory workshops. They served as a method to obtain data and information about the slum dwellers for the research, yet also provided an excellent opportunity to observe people's communicative behaviour and skills for self organisation, while for the slum dwellers the research was an experience of self-articulation.

4.3 'Sampling' for Qualitative Research

4.3.1 Why Ahmedabad?

Recent events in India, the 2001 earthquake and the riots of 2002 in particular, reinforce a need for further research in this Indian State as they show that there have been only few long-term preparations to manage various risks (NCDM 2002). The history of disasters is long, especially in Gujarat (Chapter V). As has been reported since the early 19th century a considerable number of cyclones (1996, 1998, 1999), droughts and heat waves (1998, 1999, 2000), floods (1996, 1997, 1998) and earthquakes (1938, 1956, 2001) regularly hit the region[22], not to mention occasional outbreak of social unrest.

Thus several criteria support the selection of Ahmedabad as an appropriate case to study in detail:

[22] www.//Inweb18.worldbank.org/sar/sa.nsf/Attachments/ppt2/$File/Gujpres2.pdf

1. It is the seventh largest city in India in terms of population of which about 40% are slum and *chawl* dwellers.
2. In the last decade the Ahmedabad Municipal Corporation (AMC) introduced various partnerships to promote urban development, among these the slum-networking programme. Supporting these projects the AMC has initiated a reorganisation in its administrative and financial structure to achieve higher efficiency.
3. A number of non-governmental organisations, based in Ahmedabad, have taken initiative in poverty reduction and urban risk mitigation.
4. Since I had well established contacts with the Disaster Mitigation Institute (DMI)[23] and the Foundation for Public Interest (FPI) who are working on urban risk mitigation and slum networking. They were selected as counterparts for the fieldwork.
5. There were activities to alleviate poverty through urban risk mitigation in which the AMC and DMI took part, whereas FPI is involved in taking on the issue of urban governance and social inclusion of the poor.

These aspects provide a rich environment to investigate communication processes in urban risk mitigation. In addition, they already point in a direction towards a collaborative style of urban governance. The selection of this city as the case study relied on the qualitative criteria for its relevance and research purpose. I would like to use this as a starting point to make clear what 'sampling' or more precisely, selection of cases, in qualitative inquiry means.

For different reasons all the three study population groups, slum dwellers, AMC, and NGOs/professionals were selected according to various non-probability sampling methods (Burton 2000). Sampling in qualitative research, basically, is not along the criteria of conventional random sampling techniques as is required in

[23] In 2005 DMI was renamed into All India Disaster Mitigation Institute (AIDMI).

quantitative research. Consequently it is not representativity of randomly selected data that matters most. The selection is determined by the expected content of new contributions to theory and acquired knowledge that progressively generates during fieldwork. This sampling method has been called "theoretical sampling" (Flick 1999) allowing stepwise inclusion of cases according to already collected data and achieved knowledge, thereby recalling the idea of hermeneutic circling.

Similar to this procedure is the notion of "corpus construction", an approach that draws on linguistics (Bauer and Aarts 2001: 31), which proceeds in an iterative stepwise manner by selecting, analysing and selecting again theoretically relevant material (herein lies the essential parallel to techniques of "theoretical sampling"). Due to this procedure some authors prefer another terminology, thus speaking of "selection of cases" instead of "sampling" (Gaskell 2000: 40). In doing so, the purpose of qualitative research becomes explicit, which is *not* about counting opinions or people, but *exploring* a range of opinions, the different representations of an issue, and what underlies and justifies different viewpoints. The sampling attempts to catch the diverse range of viewpoints. Herein lays also the key to limit the number of interviews.

The assumption is that one can find in a certain social milieu, e.g. in a low-income settlement, a relatively limited number of views or positions on a topic. Thus, one way to limit the number of interviews is the *saturation of data*. Interviewing is continued until no new information arises or until a pattern arises that may be triangulated with a small questionnaire or other types of data. This is the best method to limit interviews, and it is based on the insight that a limited number of interpretations or versions of reality exist because experiences in a social milieu are part shared and not fully individual. With this procedure, theoretically, saturation is the single criterion which can end the research. It is this approach I applied to my research.

Table 4.2 displays the number of interviews and participants in the workshops. Accordingly, in Meladinagar 15 depth interviews including one with a CBO leader, four group discussions comprising one introductory session, two group discussions with women, and one group discussion with CBO leaders and some residents were conducted. Additionally, a three-day participatory workshop was held with 27 participants. In Nitinagar, 13 depth interviews were conducted of which two were with the male leaders. Furthermore, two group discussions including the introductory session and another one with women, and a three-day workshop were held with 27 participants.

Table 4.2: Number of Interviews and Participants in Workshops

Method	Meladinagar	Nitinagar	Total
Depth interviews	15	13	28
Group discussions	4	2	6
Participatory workshops	27 (17 women, 10 men)	27 (16 women, 11 men)	54
Total	46	42	88

Significant for the triangulation is the minor overlap of the same individuals as participants at the workshops and respondents of the depth interviews not exceeding seven in each case. Besides the abovementioned data collection tools, for the triangulation equally relevant were the informal chats and the observations I made during every visit in each area. Thus, by deploying a variety of qualitative data collection methods including a combination of individual and group responses, the information gathered can be considered representative particularly in terms of the range and similarity of experiences presented by the residents.

4.3.2 Selection of two Slum Areas

The task of selecting suitable areas for the in-depth study of the slum dwellers was determined by several criteria to best match the purpose of the research. Since UPP/FPI[24] was taking part in the slum networking program (SNP), I initially accompanied the survey team during their field visits in a number of slum areas.

[24] Urban Planning Partnerships (UPP) is a programme of Foundation for Public Interest (FPI).

IV. Research Methodology

The intention was to select two slum pockets using several criteria. First of all, the size should be manageable for a single researcher, between approximately 100 and 200 households.[25] Secondly, one area should have been completed in the SNP, and thirdly, have experience of urban risk reduction. In this case there was little choice. The Disaster Mitigation Institute (DMI) had conducted an Urban Risk Reduction Project[26] in 1997/98 in two slums of which one was too small as it comprised only 45 households, and the upgrading works were completed there as well. This area did not serve my interests. Consequently, only one area, Meladinagar, was left, that fulfilled all the criteria.

Accordingly, the second slum area for the research should not or not yet be taking part in the SNP and the residents should have no experience with any risk mitigation activities. After several visits of slums, I identified Nitinagar.[27] Nitinagar seemed to suit my research selection criteria well, because

1. it was poorly supplied with infrastructure and other services;
2. the houses were mostly huts with a few consolidated brick constructions;
3. residents were daily wage-earners and with irregular incomes;
4. SNP was known about, but the program was not yet implemented;
5. there were some difficulties in dealing with various actors including NGOs;
6. I had the initial impression that people were friendly and hospitable, they received me well.

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[25] In the Indian context this is pretty small, but Ahmedabad is characterised by relatively small slums which are scattered all over the city. There are only a few areas having more than 1000 households.

[26] For Details about this project refer to Appendix 4.1.

[27] At this time I took part in an evaluation of the impact of UPP with other consultants and was responsible for conducting the community interviewing. Therefore I have seen many other areas which allowed me to get an overview of the general situation of the slums in the city. None of these assessed areas has been selected for my study.

4.3.3 The Interviews and Participatory Workshops: Selection or Wishful Thinking?

For individual interviews it was important to meet a number of different residents to guarantee a range of opinions and catch various life situations. An introductory meeting was held in each of the areas before the start of individual interviews to inform the residents about the research. The principal way of approaching respondents was by selection, mostly through the help of an identified community leader or another key person in the areas. Interviewees were theoretically selected according to criteria of sex, women headed households, leaders, and availability.

Yet fieldwork practice revealed that these criteria were often reduced to the availability and willingness of the people. Therefore, in many cases it was not feasible to make appointments in advance, so that I could never know beforehand who would be available and how much time the interviewee would have. I tried, for instance, several times to speak with one woman in Nitinagar who obviously was in a very precarious situation as she was a widow and at that time was beginning to build a house in the area. She was never available since she had to provide for her family or was busy organising the construction works. There was a similar case in Meladinagar, where I finally succeeded. Women under such circumstances are very interesting for such kinds of research, but the difficulty of speaking to them is symptomatic as the women are under high pressure of survival and have scarce time.

As to the participatory workshops, a similar discrepancy between theoretically derived selection criteria and factual reality is noticeable. While easy to apply gender as a separating dimension to organise the groups, it proved almost impossible to realise the application of selecting participants according to their age, income, women headed households, the spatial distribution of households in the area, and leaders or members of CBOs. In fact, when looking at the

selection processes in a sober manner, besides gender the criteria which really mattered were again availability and willingness to attend. One has to accept that under given conditions of time constraints and a willingness of respondents, it is difficult to meet many predefined selection criteria. From this perspective it is absolutely necessary for verification to triangulate the data with the depth interviews.

4.4 Methods of Inquiry

4.4.1 The Slum Communities: Interviews, Group Discussions and Participatory Sessions

Building on the frame of research questions (Appendix 3.2) as well as on the methodological requirements of the study, two specific topic guides were drafted to investigate (Appendix 3.3; 3.4):

- the slum communities, and
- the Municipal Corporation.

Two basic methods of qualitative interviewing were deployed for the study of the slum dwellers, the semi-structured type with a single respondent (the depth interview) and a group of respondents (focus group). The advantages of these methods refer to the fact that a highly structured survey interview is characterised by a predetermined series of questions and categories. Additionally another tool was used, the less structured informal conversation prevalent in ethnographic research.

4.4.1.1 Combination of depth and semi-structured Interviews

Semi and unstructured interviews are common techniques in qualitative research to provide in-depth data. Both belong to formal interviewing techniques which ideally are conducted at an appointed time and day with a selected respondent (Bernard 1994, Spradley 1980). The structure of semi-structured interviews is

similar to unstructured interviews but based on the use of an interview guide. This guide is a written list of questions and topics to be covered in a particular order. These guides may be made up from earlier informal and unstructured interview data as well as observations. In order to cover the requirements for this research I decided to combine various tools. Used in this way, different techniques, quantitative and qualitative methods or a range of qualitative techniques can serve as triangulation to scrutinise information.

Topic guides are designed to capture the aims and objectives of the research and are based on critical reading of appropriate literature, reconnaissance of the field (observations and/or some preliminary conversations with relevant people), discussions with experienced colleagues, and some creative thinking (Gaskell 2000). Besides creating an easy and comfortable framework for a discussion, and providing a logical and possible progression through issues in focus, such a topic guide has several functions during the fieldwork. Whenever new issues arise during interviews they may be included for subsequent interviews, while equally uninteresting earlier issues may be deleted.

For this study two topic guides were formulated. One has been prepared with regard to 'the slum communities', the other one for the 'Ahmedabad Municipal Corporation'. They both have the same structure but emphasise different aspects. To develop the guides for the field study I drew mainly from Tulloch's (1999) culturalist phenomenological study of fear of crime to use some of the dimensions to investigate risk. These encompass the negotiation of meanings as personal and social practices; place as situational context (landscapes of risk as well as materially in the form of geographical conditions in selected slum areas); time (biographical, locational, historical); everyday routine including the routine management of risk via media, and talk; judgements or perceptions of risk, values and emotions as competing priorities in shaping risks and decision-making, behaviours in terms of risk avoidance and individual agency in taking, coping and

controlling risks. The diversity of gender, age, sex, class, ethnicity, caste, religion etc.; knowledge ability of involved parties (experts/consultants, slum communities, NGOs, municipal/state policy makers), access to information and to what category of information.

4.4.1.2 Focus Group Discussions

I was able to conduct some focus group discussions during the course of the fieldwork. These were not conducted in the narrow sense of focus groups which are usually systematically prepared and organised. Rather focus groups tended to occur when several people gathered, and we discussed certain issues relating to the research topic. This was the case for instance with a group of women in Meladinagar. On another occasion during my stay in this area I was able to talk with some members and leaders of the CBO about their function and relationship to other actors like NGOs and the Corporation. Therefore, these group discussions were an integral part of the fieldwork which just happened. This provided insights into emerging consensus and the manner in which people handle disagreements, for identifying risk priorities, and to come to risk definitions on group level. That in turn may be compared to insights of depth interviews and narratives with their emphasis on personal experiences. An overview of all interviews, group discussions and the participatory workshops is given in the list of interviewees (Appendix 3.7).

4.4.1.3 Booklet for participatory sessions

In order to involve the slum dwellers I decided not to use a pure approach of focus group discussions but to encourage them to work out their experiences in a set of participatory activities, thus blending these two research tools. This endeavour was to explore risk notions and communication at group level. Using information extracted from the depth interviews a booklet (Appendix 3.8) was prepared to conduct participatory group discussions specially focusing on topics of

risk experience and coping, mapping of the area, cause and effect analysis as well as internal and external communication. These sessions were organised on three consecutive days in both the slums. In order to stimulate freedom of speech the first day was organised with women, the second with men, and the last one in a mixed group.

To produce the booklet I had to work closely with my research assistants for a correct translation from English into Gujarati. This part was time-consuming but absolutely essential to guarantee as close a translation of meanings and concepts. Even though I had only a basic knowledge of Gujarati, my ability to read it and discuss etymologies and concepts on the basis of my understanding of Gujarati culture proved an invaluable advantage. Similarly, after the sessions I started to translate the content back into English together with a staff member of the NGO who also attended the sessions. A process like this is probably even more time-consuming than the first one, but the importance must not be underestimated, for again I engaged in many discussions which often emerged from single words but encompassed a wide range of cultural concepts.

Details of this booklet encompass a range of different methods to assess people's perspectives and encourage them to work individually, in small groups as well as in plenary sessions. A more detailed treatise of the experience and organisation of these sessions will be given in the subsequent section. The content of the entire booklet is given in table 4.3. For a flexible implementation of the sessions the booklet was organised more like a catalogue which offered various activities and exercises, not all of them had to be done. This is especially relevant to individual activities. Part I was done in the separate groups of men and women, whereas Part II was discussed in mixed groups.

Table 4.3: Content of Participatory Booklet

Topic Title	Level of Assessment
Baseline Information of Participant	Individual
Part I: Risk Identification	
1. How do you feel? Fears, dangers, insecurities, and disasters	Small groups for discussion, but individually prepared
2. What is your neighbourhood like? Mapping your area	Small groups
3. My experience with disasters and extraordinary events	Individual
4. Where are the roots causes imposing on our lives?	Plenary session
Part II: Institutional and Social Network for risk communication	
1. Resources and assets we have!	Plenary session
2. My social resources in times of need	Individual
3. Where do I get my information from?	Small groups, but individually filled
4. How do we communicate?	Plenary Session

4.4.2 Interviews with AMC Officials, NGO Workers and other Professionals

Another topic guide was developed for interviewing officials of the AMC. Semi-structured interviews were the main method used to investigate the position, opinions and perspectives of policy and decision makers in AMC. Focusing on organisational structure and culture, looking at the relationship between the formal position of AMC as an organisation and its relation and interplay with institutionalised procedures, power games and politics. For the formulation of research issues in the topic guide, I found it useful to partially deploy the 'web of institutionalisation' developed by Levy (1996). Her categories like 'policy/planning', 'mainstreaming location of responsibility', 'procedures', 'methodology', 'resources' and 'political commitment' helped to derive topics for my interviews (Appendix 3.4).

Initially, I had attempted to prepare a general interview guide for NGOs, but realised that before conducting each interview it is more useful to brainstorm ideas by going through notes and the project diary to identify issues for discussion, so no explicit guide was prepared in advance. This allowed me to

react very flexibly on my insights gained during the fieldwork. Additionally, in virtue of my close and long-standing collaboration with two NGOs I had the opportunity to be a temporary guest in one of the offices for the whole period of the fieldwork. This enabled discussions on subjects on a daily basis. As the research progressed I could make contacts with other NGOs involved in slum upgrading and social development activities. I was, so to say, a participant observer in this organisation.

All interviews conducted with AMC officials, NGOs, and professionals are listed in table 3 of the list of interviewees (Appendix 3.7). Interviews with AMC, NGOs and other people such as academics or organisations were conducted with the purpose of painting a more comprehensive picture of the situation in the city in terms of the SNP and the cooperation and flow of information between various agents. Initially, interviews at AMC were mainly confined to officers working in the slum upgrading scheme, but were later extended to a much wider range of departments. This was done through snowballing and became necessary due to the recognition in earlier interviews that risks and their communication are not confined to a single or even a few departments only. Especially the SNP-wing was repeatedly revisited.

Approaching AMC officers was not easy. Once I received the following response from a secretariat in the AMC when I asked for day and time to meet, "Appointments are when Mr 'So-and-so' is in the office!" This pretty much summarises the attitude and practices of the Corporation in one phrase. Difficulties in conducting interviews with officials and sometimes other respondents also arose most essentially from an attitude of making what I would call 'ad-hoc appointments' on a short-term basis. As soon as one tries to plan a little ahead, say for end of the week or even next week, one is asked to phone again that same day. Consequently, whenever I wanted to meet someone I had to adjust to that system and began to go personally without appointments instead

of making phone calls. Even when I had a fixed appointment, frequently nobody was available.

Consequently, whenever I had to go to the Corporation I tried to put myself in a mood of indifference, stoicism, patience, perseverance, and curiosity while being friendly and polite yet still determined to catch these officers. This developed into a sort of feeling which comes close to 'hunting'. The feeling of satisfaction after a successful and good interview is amazing under such circumstances. Plus I never went without a list of various alternative options of what I could do if meeting Mr 'So-and-so' or 'So-and-so-bhai' was not possible due to some reason, so that I was able to work my way through various other departments. This strategy is admittedly very time-consuming but proved to be successful, allowing me to climb up the hierarchical ladder and eventually to have a discussion with the Municipal Commissioner.

Rather than falling into desperation and frustration one should turn these conditions into an advantage and consider that while spending so much time in these premises, provided an opportunity to observe behaviour and styles of working, to inhale the atmosphere of the bureaucracy and be well known with some of the officers due to frequent revisits. Indeed, spending time with them during their tea break, having lunch together and chit-chatting was sometimes more informing than having formal interviews. It took me a while though to accept this as a 'method of interviewing' and to abandon a feeling that I am wasting much of my precious and limited time.[28] Instead after a while I felt a similar intimacy with the 'Municipal Kota' (as the main offices are called by Ahmedabadis) as I had with the slum locations.

[28] The officers I met for interviews were aware of my research since I had always introduced myself and the subject to them, even in this informal environment. So when it comes to informed consent, confidentiality and the protection of identity of these officers I made sure that these criteria were not violated (see also Appendix 3.1). In that sense I did not engage in clandestine investigation.

4.5 Qualitative Research in Urban Slums

Although this study is an exploration of communication processes between slum dwellers and the AMC, the focus stresses in-depth data collection of the former group. This fact is reflected in the complexity of research tools as shown in Appendix 3.9. The combination of these methods has become increasingly relevant and perceivable in urban applied research with more scholars believing that it offers valuable qualitative insights into the 'lifeworld experiences' of the people studied (see Healey 1997). Indeed, "[...] interactive research processes are based on dialogue and the construction of a relationship between researcher and respondents and a sharing of knowledge and experience. There is a very close and natural link between this and participatory approaches to planning and neighbourhood upgrading programmes" (Kellett 2000: 202). Researchers of this nature are driven to report on their fieldwork in a more personal way as they usually follow the post-modern epistemology that encourages or even forces researchers to reveal their relationship to the researched participants.

It is this holistic approach which particularly characterises anthropological fieldwork, the attempt to grip manifold social expressions and their interdependencies. Conventionally, the approach tries to describe and understand the cultural system of a specific group. Participant observation is the attempt to understand, in the words of Bronislaw Malinowski (1922), the 'imponderability's of life' by a combination of participation and depth interviews. Conducting ethnographic interviews is only possible when knowing people well. This requires personal relationships based on trust and confidence, good rapport and is characterised by abundant conversation over longer periods of time (Foster and Kemper 1996).

I used this approach of (participant) observation as encompassing and complementing the other research tools to provide a contextual framework for my specific research interest in risk communication. Ethnographic interviewing or interviews in general are an integral part of this process. In this section, my aim

therefore is to describe the 'trajectory' of the fieldwork with special regard to the organisation, obstacles and difficulties that occurred while doing research in the slums, and the possibility of overcoming them or adjusting to the situation.

For a better understanding of the approach to the fieldwork I contrasted a theoretical and actual course (Appendix 3.10). In theory, the course of the fieldwork period was organised and oriented around a stepwise, chronological approach to the topic. Although this implies a linear notion of the process, clearly this should be reiterative in practice. Moreover, the issues singled out were difficult to keep separate while conducting the interviews. The actual course of fieldwork has been organised more along the investigation of various actors rather than topics.

The major fieldwork period covered six months from September 2002 to February 2003 when the essential data collection took place. A follow-up fieldwork period took place one year later in March and April 2004. This latter period was considered significant especially with regards to the Nitinagar slum area as the slum networking programme was about to commence soon after my departure, in February 2003. The expectation was that the frame conditions would have changed. Besides the physical improvement of the area, the community organisation and the entire relationships to the Municipal Corporation and NGOs would change too. Additionally, this follow-up served the purpose to collect specific additional information.

4.5.1 Interview Situations

During the initial phase of my fieldwork I had several sessions with staff of the Disaster Mitigation Institute (DMI) and Urban Planning Partnerships (UPP) in order to discuss our collaboration and to introduce them to my research topic and the purpose of the fieldwork. Interviews and visits to the slum areas were eventually

conducted with the assistance of male and female field staff from UPP, who had an intimate knowledge of Meladinagar and Nitinagar due to their involvement in the slum networking programme.

UPP staff had to become used to the way of unstructured interviewing as a method. It took some time for them to become familiar with my topic and my way of thinking, namely that I wanted to stay as close as possible to what the respondent said and not a summary. At times the interview situation was odd, because I did not really know what and how the research assistants asked the questions, especially how suggestive their questions were. Admittedly verbatim translations are difficult, especially as we had a cross-cultural interface that involved a lot of symbolic translation as well, but the field staff had experience in asking questions and dealing with slum dwellers. Therefore, they often demonstrated a sense for specific issues and how to ask people. My problem was that I was unable to check this efficiently.

Frequently, but unavoidably and impossible to eradicate, was my assistants' lack of attention to issues that I would consider interesting. This cultural blindness results when someone being part of the research process, contrasts with the curiousness of an ethnographic researcher. In this regard my basic knowledge of Gujarati helped me a great deal in being able to refer to specific words mentioned by the interviewee which I would not find in the translation provided. I used to follow up such words and engage in a conceptual discussion of what exactly the meaning of this word would be. In this way I would seek to find out whether and in what way the word would relate to my research topic. On the other hand I could observe that after some time my research assistants understood my concept of interviewing, even though I had to remind them every now and then of the need to translate rather than summarise. They also began to pick up the topics I was always interested in beyond the interview, i.e. particularly the socio-cultural context. Thus I regularly initiated discussions before

or after an interview on seemingly unrelated topics about people's lives and thinking, using an upcoming festival or something that I had observed as a starting point.

I also sat with my research assistants to discuss the content of the interviews. I owe much of my understanding and clarification regarding the comments of the people to these conversations, as the research assistants enabled me by bringing the information provided by the slum dwellers into the cultural context. Often these long discussions revolved around caste, religious beliefs or specific customs. Some of these reflections on how the interviews went triggered rearrangements in the content and strategy of interviewing. In one instance I added some new elements for our ongoing interviews with the slum dwellers that aimed at expanding the discussion of risks to more social aspects in terms of social obligations; such as gifting during certain occasions, and also the issue of marriage and the position of women.

Interview situations are dynamic and never predictable. Successful interviews depend to a large degree on the relationship between the interviewer and respondent. Consequently an interview is a 'communicative event' in itself (Briggs 1985: 2). Other crucial dimensions before starting an interview are the accessibility, availability and willingness of people. This, naturally, was not easy to identify and assess during the one or two visits during the selection process. In this respect I decided what to do on the basis of the impression and feelings which I had gained in conversations and encounters with the residents. In Meladinagar this was less an issue since on the one hand the residents had had long established contacts with NGOs due to the implementation of the SNP. On the other hand the FPI office had one staff member who lived in Meladinagar, which made the access easier in the first place.

The situation in Nitinagar proved to be quite different. After the first visits we realised that people were reserved, sometimes reluctant or even refused to talk

to us. The main reason being earlier encounters with other NGOs and researchers who came to the area for surveys, raising hopes for action that never happened. Also, the people had begun saving for the SNP but the implementation was not in sight, quite understandably the people were frustrated and suspicious. Therefore to build trust and rapport under such circumstances was hard. Questions in which way our study would help and change their conditions were abundant and always difficult to answer. While one of my research assistants initially wanted to give this area up due to these difficulties, I considered them as part of the overall situation and of the research subject itself. For this reason I decided to continue with the work in Nitinagar. This proved to be the right decision in the end, although we still had some difficulties with people who refused to give an interview or who began one and then stopped.

Aggravating people's negative attitude towards us in both the areas was the fact that we interrupted them in their activities. But attempting to find appropriate timings to conduct interviews was equally futile. For example, at noon was always difficult because this was lunch time, or in the evenings women would go to fetch water and prepare the evening meal. An inability to predict suitable time was an added difficulty as women did the laundry or vegetable vending in the mornings and so on. In fact, there was no 'best time' of the day for interviews.

While we usually attempted to do interviews with one of the adult members in a household, male or female, the interview often developed into small group discussions with neighbours joining in. I usually did not intervene because such group discussions displayed the dynamics within the community, often highlighting new issues and yielding rich additional information. This maybe called with Briggs (1985: 2) the meta-communicative standards of the people. Briggs argues, "speech communities possess repertoires of metacommunicative events that they use in

generating shared understandings with respect to themselves and their experiences". So, inasmuch as an interview provides my (the researcher's) meta-communicative medium, following a routine that figures prominently in the social science research community, it is absolutely natural, for instance, that people in Meladinagar enter each others house and gather there to chat and gossip. This happens at almost any time of the day, and is generally not viewed as an encroachment into a 'private' sphere. People live closely together, and they enjoy each other's company. In fact, for some of them it is anathema to live or sleep alone[29]. Company is an important aspect in people's daily life.[30]

The series of interviews was started by using the prepared interview guide discussing the daily life of respondents. However, after a couple of such interviews I was not very satisfied because they were very time-consuming and too general in their content. As a result, I changed the strategy and restructured the whole interview situation. Instead of asking people about their daily life where they gave broad and less research topic focused information on their situation, I decided to bring the topic of risk perception more into the centre. I wanted to turn this around and have the daily life more in the background to risks and dangers that were the centre of our conversations. This shift of focus was an improvement (Appendix 3.5, 3.6).

However, the flexibility and openness of the restructured interview guide was retained. The idea was not to cover all topics or questions but to react to what the interviewee responded with. This enabled us to follow specific issues mentioned by informants such as having them recalling an episode regarding the riots or floods, the daily struggle with the employment situation or their belief in

[29] This is an aspect which I encountered in many other conversations in general. Most Indians find it difficult to understand the western way of life with an emphasis of living alone, separated from parents and other family.

[30] During my stay in Meladinagar I often felt somewhat 'overstressed' with this aspect. Yet it must be borne in mind that my presence as a resident changed the situation in the slum and attracted special interest.

Mother Goddesses, thus interweaving life narratives and episodes with the context of risk.

4.5.2 Participant Observation

The boundary between the interviews and (participant) observation was always kept fluid during the fieldwork. This was an intentional necessity to accommodating to the slums that often did not allow conditions for one-to-one interviews. Each interview situation, therefore, was more than a profane collection of data, but more of a social event especially for the residents. While we were sitting for the interviews I always attempted to observe activities happening around us. The fieldwork methodology I had in mind was a combination of observation, informal chats and semi-structured interviews to obtain ethnographic information.

Whenever the opportunity arose I stopped to talk to people, accepted their invitations for tea (on some days I had ten or more teas!), or observed what was occurring in the neighbourhood. Sometimes people were busy and we had to end an interview, at other times I was able to discover specific and important aspects of their life. This happened one day during an interview in Nitinagar, when I observed that several girls and women started to pick up buckets and went off to fetch water. We had had several discussions about the lack of adequate and sufficient water, and the slum dwellers had repeatedly informed me about various sources of water. This time I asked them whether they would show me the place where they obtain water from, which turned out to be from a nearby public housing estate. I would not have found that place and encountered a typical situation like this if I had mechanically continued the interview for the sake of it. To make such valid changes in direction is not easy nor to decide the efficacy of such decisions to the project, but in my experience, most of these changes of mind were of high research value.

In order to better contextualise the data of the interviews I had initially intended to visit both the areas, without my assistants, specifically to carry out observations. After one such experience in Nitinagar I realised that this was not helpful because of the liability of misunderstandings due to the limits of my linguistic ability in many subjects of discussion. The idea to build up trust and rapport with the people was thus thwarted. Despite being able to glean some relevant details during this 'experiment', I decided not to repeat it. Later in a conversation with one of the residents this decision was confirmed as correct as he mentioned they had felt uncomfortable having me alone without company as their guest with such a limited ability to communicate.

However, from the very beginning of my fieldwork I was considering the option to stay in one or both the areas for a week and live with the people. In the end I had the opportunity to conduct a type of concentrated participant observation in Meladinagar during the period from November 24 to December 1, 2002. This period may appear short, but nevertheless decisive. During that period I was able to stay at the house of one UPP/FPI staff member whose family agreed to accommodate me for one week, which was an extraordinary experience and useful to generate a more holistic picture of Meladinagar. This was particularly important because we usually visited the areas for interviews only between 12.00-5.00 pm leaving out the important times of mornings and evenings.

Furthermore, opportunities arose to get to know more people for further interviewing and group discussions, to take part in social activities and recognise their importance for the people. My perspective of the city changed, as I had 'switched sides' from the posh western bank of the Sabarmati River to the industrially coined part of the city with its old historic core. The micro-cosmos of Meladinagar became the hub of my experience for one week. I became involved in many discussions regarding people's life and customs which I later discussed

with my Gujarati teacher who became more and more an ethnographic informant for me than a language teacher.

Unfortunately, this enterprise was not feasible in Nitinagar. First of all there was no such person who could guide me into the community, and I would have had to stay in a separate hut. Another reason which made it more problematic in that area was the attitude of the people, although they invited me to stay, they were suspicious of me due to the obstacles we had encountered while carrying out the interviews. There was a chance that people may not be in my favour once I arrived there. So I discarded this idea of staying.

4.5.3 Participatory Workshops

Organising and managing these three-day sessions was a challenge in two ways. On the one hand I had to prepare the field assistants of FPI/UPP, and on the other I had to observe the course of the sessions. Since I needed some members of FPI/UPP to conduct the sessions, I first had to make them acquainted with the booklet, the contents, purpose and methods. Seven assistants were in the group which conducted the sessions in Meladinagar including four women and three men. For Nitinagar some team members changed while others who had gained experience in the Meladinagar sessions participated in order to guide the new team members. This proved useful and provided a learning experience for the NGO workers as well.

While the sessions in Meladinagar took place in a house in the area, in Nitinagar I decided to look for a venue which is spatially separate. A garden was found suitable for such an occasion. Generally, there were many difficulties regarding the organisation of these group meetings. Time and motivation of residents in both the areas posed major constraints, and calling the people for the meetings proved to be very time consuming and needed a lot of persuasion.

Although the meeting had been announced in advance, in the case of Meladinagar it was almost impossible to keep the groups consistent throughout the sessions. People used to leave and join the group whenever they wanted (just like during a lecture at a German university), and after three hours the groups would begin to dissolve. As á result, there were many interruptions, with work atmosphere and concentration low. A further problem was the location itself. Held in a typical 15 sqm slum house the room was too crowded, and bad ventilation caused a feeling of suffocation for both the participants and facilitators.

Some particular glimpses of the session in Meladinagar from my diary may give an impression to the reader in which way such an exercise requires a lot of organisational and personal skills and how unpredictable and dynamic their course may be:

> "[...] finally about twelve men appeared and assembled in the house. Immediately they started to discuss and question the entire exercise and the purpose and use of the meeting. I could not follow that, but realised that there is some hot issue coming up when two of them (one was a leader) started to become loud and shouted at each other. Soon a tumultuous dispute developed between them. I was told that they did not agree on the water issue and how to complain about it. One said he does not get sufficient water, while the leader replied if he has a complaint he should go to the AMC. The dispute developed into a heavy fight including other participants who tried in vain to stop them. The whole session came almost to an end before it could even begin. It was not possible for about 10 min. to stop the two. Even I tried to intervene but they would not listen to me either. It was obvious that I too do not have any authority to do this. Unfortunately the two opponents left the session. One of them joined later again after he calmed down and explained to me that the leader began to talk about the past while he himself argued they want to talk about the present problems now. The leader pointed to his late son who was a very active and respected leader of the community and got very angry. Thus personal problems were intermingled with the community's interests." (project diary, Friday 17th Jan, 2003).

With the experience gained from the workshops in Meladinagar, the sessions in Nitinagar were held at a place which guaranteed more space, fresh air, and which the participants could not easily leave. I owe this suggestion to one of the experienced PRA workers from DMI. Moreover, it had been a good idea to announce that a snack and travel costs of Rs. 30 per participant would be provided. This amount of money was deliberately not called compensation, yet

was much more than was needed for the travel to the garden. Indeed, such an environment allowed a much better interaction between facilitators and participants. The atmosphere was relaxed, concentrated, and everyone enjoyed doing the exercises. It allows the people being away from their daily tasks, to be able to leave their area and simply engage in something very different to their daily duties without financial hardship.

Notable too, is it that I, as the person who designed the research and tools, often faced difficulties to convey the intention, aims and details of the research topic not only to the participants, but even to the facilitators. The UPP field team was quite inexperienced in conducting the sort of qualitative research required. Efforts to train them had been made but throughout the sessions I had to intervene at times to clarify certain issues. One problem was, of course, language which prevented me from consistently following the group discussions. Rather I had to rely on the field team and its ability to handle and organise the discussions. Consequently, my function was for most of the time reduced to that of an observer.

Regarding the requirements of the session exercises, some general observations are useful. The high number of illiterate participants slowed down the pace when resorting to individual activities. While in Meladinagar the ratio of illiteracy was mainly among women, both men and women were affected in Nitinagar. Under such circumstances it proved advisable to either skip such activities or keep them to a minimum, in order to reduce the need of a one-to-one ratio with fieldworkers and participants. Where this was not given, as was often the case, many participants had nothing to do and tended to engage in other activities or even leave the session because they were bored. This also occurred when the sessions lasted longer than three or four hours, since many participants lost interest and concentration. Although we attempted to have the sessions without children, this was complicated, especially in Nitinagar where women kept insisting

they would not know who is taking care for them or just wanted the kids to have a fun day out in the garden.

In summary, one should always keep in mind the importance of logistics; where to conduct the sessions, in the local area or at another venue, what about transport, snacks, and the like. Essential is provision of an environment which is comfortable for both the facilitators and the participants.

4.5.4 The Research Environment

Several events occurred in the city during the period of fieldwork that influenced its conduct in one or another way. Frequent festivals like *Divali*, the nine nights' celebration of *Navratri* for the Mother Goddess, or the Kite Festival *Utrayan* can be considered as harmless. Nevertheless they still contributed to the interruption of research activities due to holidays in offices and made conducting interviews, especially in the administration, difficult.

Some other events were also topically related to my research in some way. Especially the impact of the riots in 2002 that caused a general fear of more rioting or clashes between Hindus and Muslims, the Gujarat State assembly elections on 12 December, and the anniversary of ten years demolition of the Ayodhya mosque (6 December 2002). Other occurrences like the attack and assassination of visitors at the Akshardham Temple in Gandhinagar approximately 35 kms north of Ahmedabad at the end of September caused two days of a so called *bandh*. This old custom entails the closure of shops in the city as a symbol of protest. This caused a very unstable political situation. Such days of *bandh* are often occasions when rioting sparks off, starting in shops that ignore the forced curfew. My diary notes indicate that two of the most sensitive dates were 6 December, and 12 December 2002:

"This is not a normal day in the city, rather something is in the air because two sensitive dates fall together. First of all it is the designated day of end of *Ramadan*, the holy month of fasting being celebrated as *Id* festival by the Muslims. This is the prime reason for heavy armoured police and army in the city. It is a direct result of the riots that all the security is there, earlier it was not like this. The second reason for high security alert may be that on the same date 10 years ago the *Babri Masjid* in Ayodhya was destroyed.
When I came to the office in the morning I was quite unprepared because in the west of Ahmedabad one does not realise it, but Ellisbridge and the east is under high security. I was told it would not be a good idea today to go to Meladinagar because there is a possibility of riots in the city. The atmosphere is more tense anyway due to the election campaigning which started to be more aggressive from this week. In addition, Meladinagar is located near hot spots like Bapunagar and we always also pass the *Vohra Roza*, a mosque complex. After Lakshmiben spoke to Kankuben[31] she told me until election date on 12 Dec we will bypass the *Vohra Roza* in the north so as to avoid this area." (project diary, December 6, 2002).

"Today are the assembly elections in Gujarat. Again we are not going to any of the slums. My research assistants refuse to go especially to Meladinagar which is close to a *Vohra* Muslim neighbourhood. The nearby areas Mirzapur and Shahpur are very sensitive areas too. So, I find myself somehow trapped in an 'urban risk' which affects at least temporarily my own fieldwork. Kankuben also said, last night two incidents of violence have been reported in areas near Meladinagar. Especially the slum on the other side of Arvind Mills is prone to violence. There is already a permanent military post and a Muslim Relief Committee is also active there." (project diary, December 12, 2002).

4.6 Interpretation and Analysis of Empirical Data

4.6.1 Data Processing Perspectives and Tools

It is inevitable at the outset to consider the terminology usually used for the process of making sense of data, namely data analysis. In the spirit of the anthropological methods and approach taken for this study, it is more appropriate to talk of interpretation and analysis of data. Analysis in the very sense of the (Greek) word, i.e. breaking down into pieces, must be viewed as linked to a process of interpretation. As emphasised earlier in the conceptual approach, the use of qualitative data is seeking to gain new understanding of a specific situation and experience, learning from the detailed accounts presented by people in their own words or records in field notes from participant observation. In such

[31] All names are changed.

field studies, ethnography, or action research the goal therefore is for a rich description and vivid presentation of new understanding.

As is natural with qualitative research, the fieldwork yielded a large amount of text documents. In terms of the overall approach it was necessary to undertake a partial analysis and interpretation of data during fieldwork itself. Decisions to follow up specific topics and issues, judgements to consider others irrelevant as well as changes in topic guides must be seen as part of a preliminary interpretation of the information collected up to a certain point, even though a focused and systematic analysis had taken place after return from fieldwork. For example, I used to discuss aspects of my research with my Gujarati teacher who regularly aided in putting into context certain experiences I had in the slums or explaining the meaning and etymology of words. Thus I was able to slowly learn some connotative meanings of words and phrases which related to my immediate fieldwork and that I could follow up later.

To some extent I have used NVivo version 1.3, a software programme facilitating qualitative data analysis. It allows the creation of a research project that holds and manages data, observations, ideas and links between them in a highly linked and integrated way.

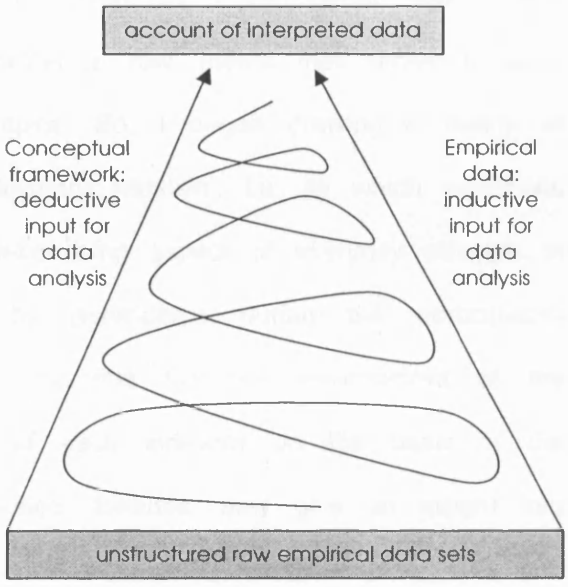
I have mainly utilised the coding function of the Node System to structure and organize data relating to 'risk'. This is only a small window of the extensive options of NVivo which I found particularly effective and suitable. For my overall use I preferred to take a middle way by using this programme for the generation, linking and structuring of coded text passages, as an inspiration for writing memos and later on condensed write-ups on specific topics that I had identified. Parallel to the ongoing data analysis I wrote a report in diary format to document my data analysis activities, the purpose and the results. This helped to keep track of the entire process and served as a record in order to recall and structure writing up this section on the data analysis.

The documents which were fed into NVivo included all interview notes, textual statements transferred from the participatory workshops, and my own observations from my field notebook. It should be noted that the analysis given in the subsequent chapters has gone through a multiple process of interpretation. Various stages of interpretation of the depth interviews and workshop sessions can be identified. First there was the respondent-translator/interpreter-researcher process during the actual interview. This was followed by the interpretation by the researcher in the writing up process, and lastly one may argue that you, the reader, are translating it into your own way of thinking. Thus the communication of reality is undergoing a permanent process of re-interpretation.

4.6.2 The Iteration in Data Processing

The procedure of data processing for analysis reflects the earlier mentioned retro-deductive approach, and demonstrates the close interplay between the conceptual framework and empirically collected information. Thus the fine-tuning of the conceptual framework was inspired while working with the data derived from fieldwork. This method helped to generate greater precision simultaneously in developing the conceptual approach further and in return interpreting the empirical data. Therefore, the process may be described as an escalating spiral that starts at the bottom with a great deal of vagueness. When it moves up through the enhanced intensity of coding, linkages between the codes and the interpretation leads to an increasing density of information (*Informationsverdichtung*) and a

Figure 4.1: The Spiral of Data Analysis



variety of options for interpretation and analysis, which eventually ends with a concisely written account (figure 4.1).

Data processing was first commenced focusing on the risk aspect of the study. Using a mix of induction and deduction, an initial list of codes was derived from the literature in the conceptual chapter and fieldwork material in order to generate and structure codes. Coding of depth interviews was begun by reading and the ongoing development of new codes. While the coding process continued, the drawing of biographical (case-wise) cause-effect relationships was initiated. In some cases memos of emerging individual case studies were prepared including a diagram on risk conditions.

The continuous coding of the material showed slowly evolving patterns with connections arising between the codes, which made the differences between Meladinagar and Nitinagar clearer. This triggered writing comments that clarify the links and meanings of certain codes. In doing so I discovered that I was already doing something similar to organising a 'raw' matrix that shows peoples' perceptions and 'classifications' of risk topics. So, I began drawing a matrix of indicators that describe the risk of 'employment situation', i.e. by which conditions employment becomes an insecure and determining aspect of everyday struggle in the slums. The indicators mentioned by participants during the participatory sessions are explored. These indicators describe the risk environment of the 'employment situation' and the strength of each indicator on the basis of the frequency with which it has been mentioned. Besides, they give an insight into the interrelation with other risk spheres such as health, natural events, riots and crime, and so forth.

While specifying other 'risk spheres', it was noticed that the categories (the indicators) that appeared in 'employment situation' could be expanded with others that are specific for 'health'. In this manner a matrix emerged showing the interfaces of the different risk spheres, the significance of certain indicators, and

at the same time the specificities of each risk sphere (i.e. the main areas of concern or cause).[32] This generation of indicators and relations between risk situations yielded valuable insights, yet some elements still remained unnoticed. For instance, the significance of the faith in goddesses and the role of deities in daily life are hardly mentioned in the participatory workshop material. Therefore, besides testing the results of the matrix, the depth interviews did provide more detail and additional interpretation.

The function 'document sets' in the NVivo enables the editing of a list of all documents within the total dataset which are to be taken for data retrieval. In this case I wanted to work only with all the depth interviews to see what codes occurred there. This raised the possibility of calling up certain codes, e.g. 'occupational risk' or 'flooding' within this set of documents. This was subsequently compared with the data from the matrix, which was till then based on another set of data, the participatory sessions. This method allowed for a triangulation of data and the amendment and further detailing of the matrix.

Parallel to this structural analysis I continued to prepare descriptive 'memo write-ups' of the different risk spheres identified through the matrix. For this I decided to go through the specific node e.g. 'health' in order to filter the keywords and codes to obtain a grasp on key topics. This process was the first step in generating a written account around a risk sphere. However, the text was still very crude and close to the original notes, for I copied the coded passages and wrote them up as verbatim as possible in order to maintain their authenticity. These 'memo write-ups' were later fed back into the NVivo project data and coded again for further interpretation. With an increasing number of 'memo write-ups' the links between various risk conditions became more transparent and took

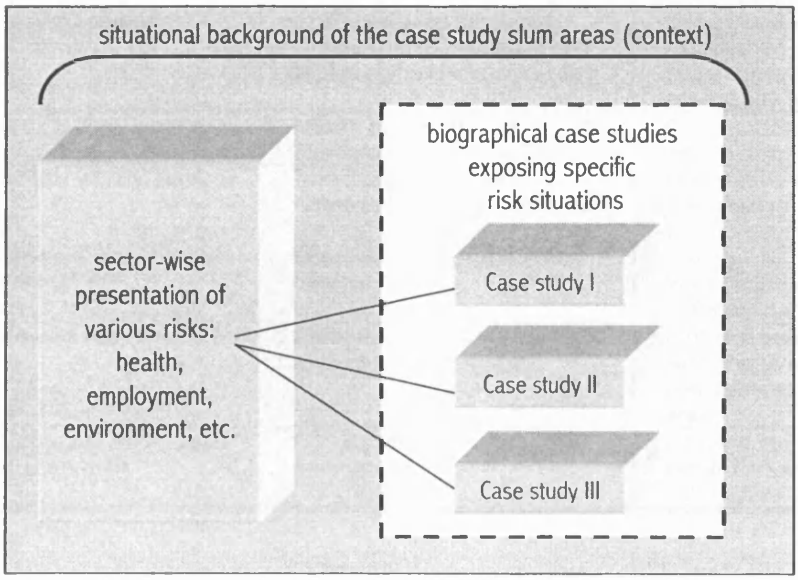
[32] The matrix of Nitinagar and Meladinagar is displayed in Chapter VI, whereas an aggregated matrix is available in Appendix 5.5.

shape, as the causal connections were at times overlapping with the ones from earlier write-ups.

Before continuing with such write-ups a need arose to go back to the depth interviews which were first coded to cross reference them. Since more codes with a higher precision and a better profile evolved during the coding process, some did not occur in the documents that had been coded earlier. This was an important step in order to guarantee the same level of coding for all documents and increase the density of coded text passages. By then, codes were progressively arranged as tree nodes, that is, in a hierarchical structure involving a set of other nodes. For instance, 'social situation' would be comprised of 'marriage'/'social prestige'/'social obligations'/'family,' apparently some of these nodes overlap with other tree nodes. Such an interface simply demonstrates the connection to other risk spheres as is illustrated in the general matrix. This process of coding, memo write-ups, recoding, and further writing up brought the major subjects or themes to light. Consequently these write-ups provided a good basis to order and structure the risk dimensions and their related topics. In addition, the matrices give a useful overview to the different risk areas and their immediate relationships.

The methodology of risk data interpretation for the two case study slum areas is displayed in figure 4.2, which illustrates the approach on three different levels. First, a situational background of the respective area regarding socio-economic information, location, and statistical data is provided. Second, the sector-wise illustration of risks as mentioned by respondents in interviews and group sessions presents generalised details of risk situations; and third, whenever useful a biographical case study was inserted linking the general risk analysis with individual experiences. This approach allows a generalisation of the situation within the two case study areas, and a comparative analysis across the two settlements.

Figure 4.2: Method for Risk Data Analysis



Following this process, the focus of data analysis was shifted towards interview notes of AMC officials and other professionals. The data were also integrated into the NVivo databank and, where applicable, coded on the basis of the existing nodes. However, this set of data was smaller, less complex and varied than the one of the slum dwellers, since the interviews were conducted with key individuals of selected AMC departments and other institutions. Categories were formed on diverse criteria, such as perception of risks within the AMC, opinions of AMC officials and professionals about the conditions in the slums, and partially along specific risk sectors. The procedures described above are outlined in table 4.4.

Table 4.4: Procedures of Data Processing – Generalised Overview of Risk Analysis

Steps	Activities	Purpose	Analytical process
1	Initial list of codes created from empirical data, literature review and brainstorming	Generating codes	general categorisation
2	Data transfer into NVivo and first scan of documents	Initial coding; Creating new codes	Testing usefulness of predefined codes; Getting a feeling of the data
3	Intensified coding	Coding of all documents; Creating first memos of risk topics and individual cases	Links between nodes are established; Differences between slum case study areas evolve
4	Built up a 'risk matrix'	Matrix to identify risk dimensions and their links	Constitution of risk spheres and their connections
5	Write-ups of risk spheres	Structure coded text Compile first topical write-ups	Descriptive accounts of the information
6	Going back to documents which were coded in the beginning	Intensify the level of coding in order to cover the entire data set	Improvement of quality of coding; Verification of data by using different data sets
7	Continued with write-ups	Created detailed accounts of individual case studies	Connect individual cases with the overall picture of risk spheres in each slum area;
8	Writing up of findings for each slum area	Condensed presentation of findings	Enabled comparison of risk conditions across the two slum areas

The database used to analyse communication processes included the entire set of documents established in the NVivo system plus additional, secondary material. Facets of communication had already emerged from the risk analysis procedures. Yet it took a focus on the twin concepts to structure the material in a systematic manner. Thus the 'spiral process' of data analysis along the major categories identified in the conceptual approach of urban risk communication, the twin concepts, was simultaneously intensified and fed back into the conceptual framework.

Part 2

The Case

Chapter V

The Context: India and Ahmedabad

"Within the framework of safe urban planning and management the traditional wisdom of urban planning that was evolved over thousands of years in India needs to be revived and imbibed in the current practices. The concept of the 'Vastu Purusha Mandala' that dealt with the habitat space as a living organism was very conscious of the fragile relationship between development and environment, and this consciousness led to design and development parameters that were far safer than those followed today" (NCDM 2000: 85).

V. The Context: India and Ahmedabad

5.1 Urban Risks and Disaster Management in India and Gujarat

The first two sections of this chapter focus on the background of risk management in India and Gujarat, discussing briefly the structural, institutional and legal aspects of disaster risk management. Special reference is given to three aspects, i.e. the integration of development, urban risks and local governance. I then turn to the core of this chapter introducing the city of Ahmedabad, in particular various aspects of its history, society, culture and economy in relation to urban risks.

5.1.1 A Brief Disaster Risk Profile of India and Gujarat

Due to its unique geo-climate conditions, the Indian Subcontinent is one of the most vulnerable regions in the world. Natural hazards comprise of drought, floods, cyclones and earthquakes, each having an impact on the country and the people. Among the 31 States and Union Territories, 22 are disaster prone. This vulnerability to natural disasters is compounded by frequent occurrences of manmade disasters such as fires, epidemics, civil unrest and so forth. Between 1988 and 1997, disasters killed more than 5,000 people and affected 24.79 million every year. Due to the changing topography, on account of environmental degradation, the vulnerability of the country has also increased. For instance, in 1988, 11.2 percent of total land area was flood prone, but in 1998 floods

inundated 37 percent of the geographical area (NDRM 2002-07: 5[33], Sharma 1999: 2).

The National Centre for Disaster Management (NCDM 1998) noted an increasing trend of losses due to disasters with the three most devastating hazards floods, cyclones and earthquakes. Besides the factor of population density, this phenomenon is furthermore ascribed to the increasing monetary losses and damages due to infrastructure, lost crops, loss of animal stock, and so on. In this respect Sinha (2003: 45) notes, "The increase in the vulnerability in recent years has been a serious threat to the overall development of the country. Subsequently, the development process itself has been a contributing factor to this susceptibility. Coupled with lack of information and communication channels, this had been a serious impediment in the path of progress." This comment raises two important points for this study. First, it clearly establishes the link between disaster risks and development. Second, it highlights the importance of communication in this respect. Besides urban risks, these two aspects guide the following evaluation of the contemporary attitude towards risks in India.

Gujarat has repeatedly made headlines in the past years on account of recurring disasters of various types. It is the westernmost state in India with a population of some 49 million (Census of India 2001), and a geographical area of 196,000 sq km. The state capital Gandhinagar is north of the major city of Ahmedabad. The state, bound by the Arabian Sea, has the longest coast line of all Indian states (approx. 1,300 km). According to hazard maps, Gujarat is located in earthquake zones III (includes Ahmedabad), IV and V (Kucch). The frequency of cyclones, drought/heat waves, floods and earthquakes[34] proves the multi-hazard

[33] The National Disaster Risk Reduction Programme is available from www.undp.org.in/dmweb/ndrm/default.htm.

[34] Cyclones: 1981, 1982, 1983, 1990, 1993, 1996, 1998, 1999; Drought/Heat Waves: 1987, 1998, 1999, 2000; Floods: 1980, 1989, 1991, 1993, 1994, 1996, 1997, 1998; Earthquakes: 1819, 1845, 1847, 1848, 1864, 1903, 1938, 1956, 2001

disaster history of the state. This is evident from the five most recent major calamities, namely the 1998 cyclone, 1999 drought, 2000 floods, 2001 earthquake and 2002 riots. In the face of such large-scale adversities, smaller disasters like the malaria epidemic in 1997 and plague in 1995 have been largely neglected by the media and subsequently in mitigation efforts. Some authors argue (Bhatt, n/d; Hirway and Terhal 2002), vulnerability to such hazards does not emerge on account of socio-economic stagnation, but is a result of rapid changes in the region. In this view, the level, pattern, and structure of growth triggers concomitant changes, which have adverse social, economic and environmental consequences. While there is a continuous focus on economic growth and to some extent poverty alleviation, the correlations of these 'contradictions of growth' have been largely neglected till today.

Bhatt[35] asserts the multiplicity of risks in Gujarat by addressing a range of issues that clearly highlights the need to look far beyond the traditional perspective of managing natural disasters towards a development oriented approach, where "[...] mitigation activities cannot be centrally designed or ordered, but should be preceded by a focused process of confidence building to enable autonomous action and coordinated response by a range of stakeholders cutting across the economic, social, voluntary and political sectors" (Bhatt, no date: 7). This notion of disaster risks and their mitigation is based on the insights onto the complex dimensions of Gujarat's vulnerability. The paper further elaborates six perspectives including among others the environmental and economic perspective, the institutional and political perspective, and socio-cultural and human rights perspective.

(www.//Inweb18.worldbank.org/sar/sa.nsf/Attachments/ppt2/$File/Gujpres2.pdf, accessed 11/02/2002). For a history of riots refer to Footnote 58, page 163.

[35] I relied to a large extent on this small but extremely useful treatise on the disaster and risk situation in Gujarat, as there is hardly any other literature available on this topic.

5.1.2 From Global IDNDR to Local Solutions: Paradigm Shifts in International and National Response

Learning from the International Decade for Natural Disaster Reduction (IDNDR) in the 1990s, the disaster management set up in India has oriented itself towards a focus on preventive approaches, mainly through reforms and participatory methods. Consequently, the general direction of current efforts is one of a multi-pronged approach of mobilising community perceptions towards a culture of prevention (Sharma 1999: 15-16). Since then a paradigm shift in disaster management has been brought about by the Government of India, which promotes a new approach that proceeds from the conviction that development cannot be sustainable unless disaster mitigation is built into the development process (Ministry of Home Affairs 2004: 4).

Constituting the High Powered Committee on Disaster Management (HPC), in 1999, "was a first attempt in India towards drawing up a systematic, comprehensive, and holistic approach towards disasters" (NCDM 2002: 67). The HPC developed a National Disaster Management Policy and stated the importance of reliable and efficient information exchange between all the stakeholders. Central to the HPC report is the identification of the need of "ushering in new cultures"[36] for the holistic development of the country and pro-active action with regard to disaster risk management, which envisage the involvement of Panchayati Raj Institutions (village self-government), Urban Local Bodies (ULBs) and the NGOs for a complete, coordinated effort. Noteworthy is the terminology here, for the use of the word 'culture' was chosen consciously to promote the mainstreaming and institutionalisation of disaster risk management in the country so that it permeates all activities on various levels.

The latest national initiatives that demonstrate the continuity of efforts and commitment to risk reduction take place under the UNDP Country Cooperation

[36] They include a "culture of preparedness", "culture of strategic thinking", and "culture of prevention".

Framework[37]. Remarkably, this programme focuses not merely on sudden disasters but also explicitly includes slow disasters. That is why, for the first time, it potentially allows for a distinctively long-term development perspective. The National Disaster Risk Management Programme 2002-07 (NDRMP) concentrates on interventions for vulnerability reduction and sustainable environment by emphasising a community based approach to achieve the objectives set forth by the Central Government. One component of the NDRMP focuses on urban earthquake vulnerability reduction in seven North Eastern State capital cities, 38 cities over half a million people in various seismic zones and 250 urban centres located in multi-hazard prone regions. It is believed that "the vital output of this project is multi-hazard risk management and sustainable recovery plans [...]. The programme will help boost local capacities to address disasters through an integrated approach for reducing socio-economic and environmental (including natural hazards) vulnerability" (Ministry of Home Affairs 2004: 2).

While it is somewhat difficult to clearly discern the designated role of local urban bodies in the policy framework proposed by the HPC, it is more pronounced in the NDRMP. The programme components indeed reflect to some extent the provisions of the 74th Constitutional Amendment Act (i.e. decentralisation, local self governance), in particular the constitution of disaster management teams and committees at all levels, the development of disaster risk management plans at the level of urban local bodies, and lastly the integration of these plans with development plans of local self governments (Ministry of Home Affairs 2004: 46-47; 54).

It also appears that the role of urban local bodies in disaster risk management has been increasingly recognised theoretically in various programmes, yet it remains to be seen how and when these often very ambitious objectives can be achieved. Risk communication is conceived in the policy strategies as either

[37] UNDP Disaster Management: http://www.undp.org.in/VRSE/ProgDistrMgmt/page3.htm.

technologies to be used for communication and how new technology can be utilised to improve such communication, or as a "national mass media campaign for awareness generation" (Ministry of Home Affairs 2004: 57) implemented by the Central government. This reflects a somewhat narrow notion of communication. The multi-lateral communication processes that need to take place in a community-led mitigation strategy on a local level and the role of local stakeholders therein is not specified in the policies.

Nonetheless, several institutional initiatives and arrangements have come up in the past years. As a response to the 2001 earthquake, among Indian states Gujarat spearheaded the establishment of a disaster management authority, Gujarat State Disaster Management Authority (GSDMA), and adopted a disaster management policy in 2003. On a national level, one of the first activities to tackle urban risks in India was the Asian Urban Disaster Mitigation Program (AUDMP) initiated by the Asian Disaster Preparedness Centre (ADPC). It was launched in 1995 with pilot projects in Baroda (Gujarat) and Kolkata (Calcutta).[38] Delhi and Mumbai (Bombay) authorities have taken more concrete initiatives in developing disaster management plans and establishing special authorities for disaster risk management (DMI/Shapla Neer et al. 2002: 76, Ranganathan 2001). A rare example of community-oriented risk reduction was the project "Reducing Risk in India" from 1996-1999 (DFID 1999), which had case studies in Ahmedabad and India.[39]

Since the initiatives taken to tackle urban risks are fairly recent, judgement remains open as to whether disaster management plans will be implemented effectively or just become another part of the bureaucracy. The above discussion provides evidence of an increasing government commitment to risk management

[38] Available at: www.adpc.ait.ac.th/general/regional.htm.

[39] For more details refer to Appendix 4.1 and 4.2.

in urban areas. This needs to be more directed towards a local-level approach that relies on participation of those who are most at risk.

5.2 Urban Risks in Ahmedabad: Economic Stress, Environmental Degradation, Natural Disasters, and Social Tension

Broadly speaking, the city of Ahmedabad has to cope with four dimensions framing its urban risks, namely environmental degradation, natural disasters, economic stress and social tension. Alone in the recent past three major disasters shook the city, the 2000 flood, the 2001 earthquake and the 2002 riots. Urban risks and vulnerability in Ahmedabad must be viewed as a result of rapid growth, both in terms of population and the economy, and ongoing processes of transformation regarding the mode of urban governance, the dynamics of globalisation and socio-cultural structures.

5.2.1 Ahmedabad: Cultural and Economic Hub of Gujarat

Contemporary notions of Ahmedabad highlight its contradictions such as conservatism in terms of its highly visible communal barriers and socialising between the sexes, but entrepreneurial acumen as business is a popular choice of career with Dhirubhai Ambani[40] as one of the role models.[41] Another study[42] finds Ahmedabad in a four city comparison second best for business after Hyderabad. Among 'soft characteristics' ranked highest stood out its cosmopolitan nature, recreation and entertainment, scope for night life and city with life, whereas cultural acceptance still features low. On the downside, pollution, health care and

[40] The founder of the very successful Reliance company.

[41] Image of Ahmedabad according to an opinion poll; Times of India, 15th August, 1997, cited in Dutta and Batley (2000: 7).

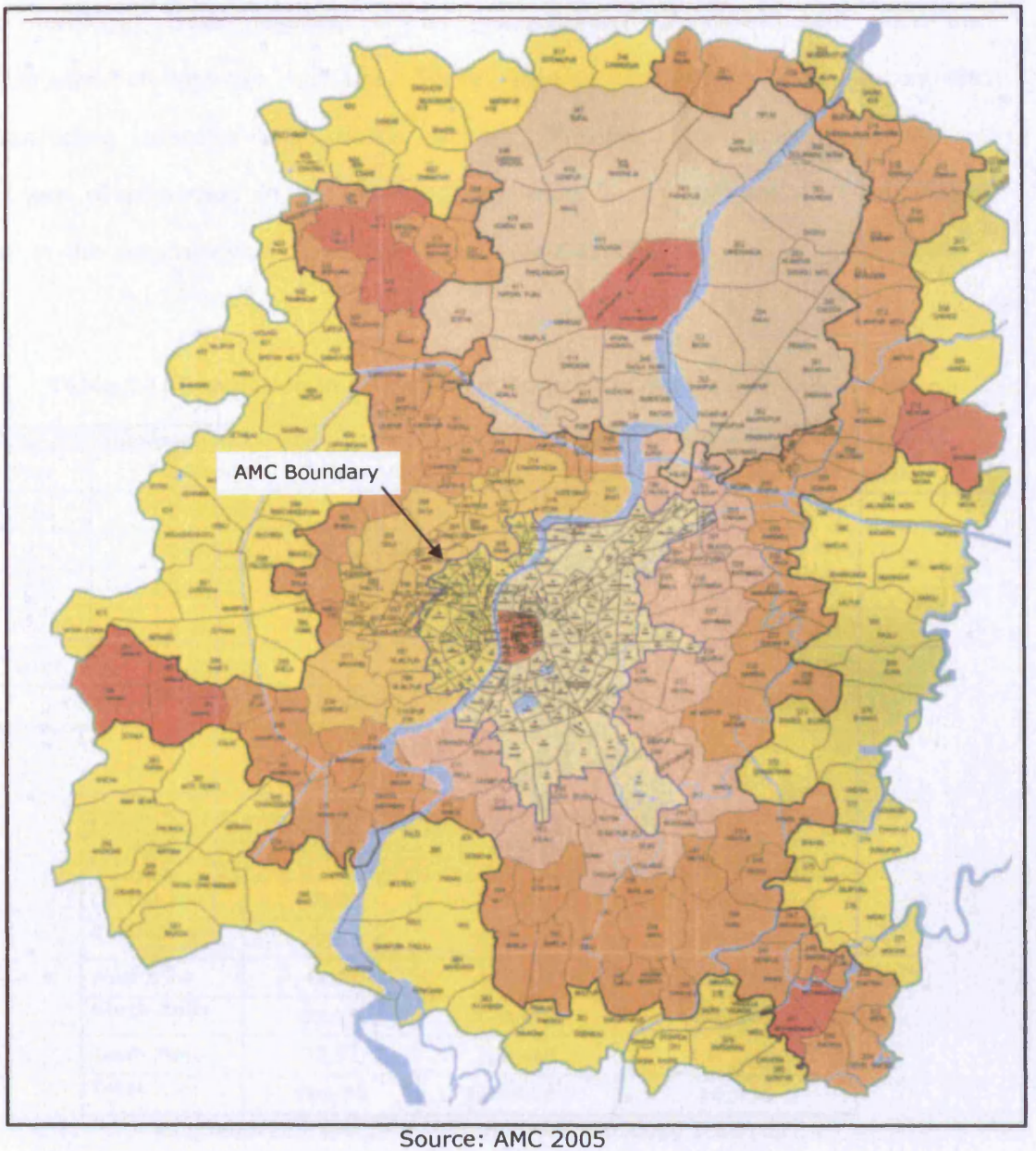
[42] 'The Best Cities for Business', in Business Today, Dec. 22.-Jan 1, 1997 cited in Ahmedabad Management Association (1998: 90) ranked Pune, Ahmedabad, Bangalore and Hyderabad.

infrastructure services are presented as poor. While the city has not lost its reputable business acumen, the overall quality of life and living standards do not stand up to its entrepreneurial environment.

The city was founded by Sultan Ahmed Shah in 1411 A.D. During the 'British Raj' (British Rule) the city acquired the *epitheton* "Manchester of India" due to its influential textile industry. Initially located on the eastern bank of the Sabarmati River the land area covered 5.72 sq km in 1857. Nowadays the municipal area stretches along both banks of the river with an area of 190.84 sq km. The river flowing north to south divides the city into two parts, the western part primarily residential and important public institutions, whilst the eastern part is dominated by commercial, business and industrial activities (map 5.1). Both, the eastern and western side slope gently towards the river providing a natural drainage. The city experiences extreme climatic conditions in summer with temperatures of 45°C and in winter 8°C, and an average rainfall of nearly 750 mm.

Ahmedabad is the largest city in the state accommodating 23 percent of Gujarat's urban population and seven percent of the state's total population. The urban agglomeration also ranks seventh in India in terms of its population size. At the beginning of the 20th century (1901) the city had a population of 185,889 which grew to 3.5 million people residing in the municipal limits as per the Census 2001 (table 5.1). To some extent this growth took place because of accretion of new areas rather than by transformation. The largest expansion in 1986 virtually doubled the size of the Municipal Corporation from 98.15 sq.km to 190.84 sq.km at present.

Map 5.1: Greater Ahmedabad and AMC Limits[43]



Source: AMC 2005

Peripheral growth though speeded up markedly as reflected in the growth rate of the urban agglomeration, and this process continued unabated (Dutta and Batley 2000: 14). The city is divided into five administrative zones having an average population density of 18,420 persons per sq km with the highest population density in the central zone and the lowest in the south zone (table 5.2; AMC

[43] The colour codes relate to different spatial units (villages, municipalities, Gandhinagar, etc.) that constitute the greater Ahmedabad urban agglomeration. They are not relevant for the purpose here, which is to show the boundaries and location of the AMC within the agglomeration.

2002a). Rapid urbanisation has led to considerable spillover of population outside the municipal limits resulting in an intensification of development with the construction of high-rise buildings. These generate tremendous pressure on the infrastructure networks and service facilities. Projections of growth estimate an increase of population in the following ten years within the AMC to 4.6 million and in the agglomeration up to six million (AMC 2003: 13).

Table 5.1: Population in Ahmedabad Municipal Corporation and Urban Agglomeration

	Ahmedabad Municipal Corporation		Ahmedabad Urban Agglomeration	
Year	Population	Decadal Gr. Rate	Population	Decadal Gr. Rate
1961	1,149,918	--	1,206,001	--
1971	1,585,544	37.9	1,760,950	46.0
1981	2,059,725	29.9	2,557,560	45.2
1991	2,876,710	39.7	3,312,216	29.5
2001*	3,515,361	22.2	4,519,278	36.4

adapted from: Census Reports and City Development Strategy 2003, p. 11
*Provisional

Table 5.2: Zonewise Population and Density – AMC Area (2001)

Zones	Area in sq.km	Population	Density (pop./sq.km)
Central Zone	16.50	577,388	34,993
East Zone	**27.51**	**783,107**	**28,466**
West Zone	42.32	673,420	15,913
North Zone	**32.19**	**779,028**	**24,201**
South Zone	72.32	702,418	9,713
Total	**190.84**	**3,515,361**	**18,420**

adapted from: AMC, City Development Strategy 2003: 12.

Ahmedabad can be distinguished on account of various generic factors into different areas with specific spatial features. Mahadevia (2002: 83-85) analyses the segmentation of the city as a reflection of the duality in the city's economy. River Sabarmati divides the city into two parts, the east with the old city, surrounded primarily by industrial estates and labourers' settlements (*chawls*), and the west with its globalising residents. In total, four areas are identified (Map 5.2). First, the walled city comprises the central business district where retail and wholesale trade have been traditionally concentrated mixed with residential use.

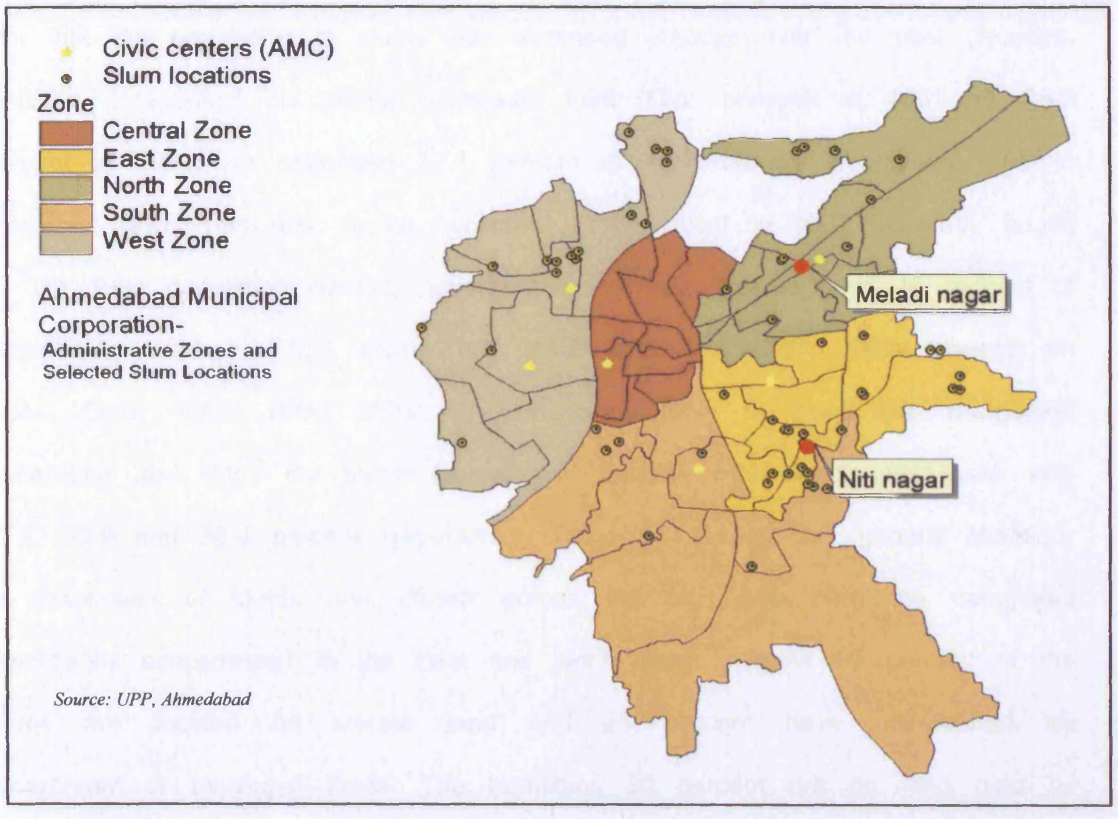
Although loosing residents since the 1970s, the area is still most densely populated (table 5.2). Secondly, East Ahmedabad comprises the area within the AMC limits but outside the walled city. This region was the first to expand outside the historic centre due to industrialisation, as the first textile mills were set up here and the railway line laid. Characteristic of this part are the *chawls,* one room houses for the textile workers, which have highest concentration in this part of the city. This area contains 44% of total housing units in the AMC region.

The third portion is west Ahmedabad, a predominantly residential area for middle and high-income groups, which also accommodates a high share of slum pockets (nearly 30%) that provide services to these groups. The university, many schools, and other important public institutions are also located in this region. Fourthly, the eastern part of the agglomeration periphery is a primarily industrial zone mixed with residential areas of workers. It developed in the 1970s and 1980s with concentration of small-scale industries and industrial estates under the Gujarat Industrial Development Corporation (GIDC). This zone is highly under-serviced and was brought under AMC jurisdiction only in 1986. By contrast, the western periphery outside the AMC limits encompasses a very fast developing region with highly dense high-rise apartment complexes, and a largely residential zone of the newly rich and wealthy. Towards the highway though are office buildings of international and national companies, hotels of international standard, and entertainment facilities for the affluent.

It is important to note that the power centre has shifted together with the transformation of the urban development: "The central city, that is the walled city, which was the trade and commerce centre, and where the decision-makers of the city, the mercantile class functioned and even inhabited, has lost its importance to western Ahmedabad. The decision-makers now live in western

areas and represent their interests in the overall city planning projects and programmes" (Mahadevia 2002: 85).

Map 5.2: Locations of Studied Slum Settlements



The most striking factor of Ahmedabad is the division of the city by the River Sabarmati. The two slums, which have been selected for the in-depth study are situated in the dense eastern part of the city, Meladinagar in the administrative North Zone, and Nitinagar in the East Zone (map 5.2). Resulting from the industrialisation in the 20th century, it is precisely this portion that harbours the highest slum and *chawl* population of Ahmedabad. Even today a significant east-west divide cuts through the city, which also impacts on the city-wide distribution of risk factors in terms of population density, supply and quality of basic services, number of industrial sites, type of in-migrants and layout. Spatially it is

the Sabarmati River, compounded by historical, economic and social factors, which contribute to the manifestation of the present situation.

5.2.2 Poverty, Inequality and Vulnerability in Ahmedabad

The share of slums in the city can only be estimated. The only certainty is the fact that the population in slums has increased steadily over the past decades. Housing categorised as slums increased from 17.2 percent in 1961 to 25.6 percent in 1991. An estimated 17.1 percent of Ahmedabad's population lived in slums in 1971. This rose to an estimated 21.4 percent in 1982. A study based on the 1991 population census, nevertheless indicates that at least 40 percent of households lived in 1023 slums and 1409 *chawls*[44] (AMC 2002a, based on ASAG Study 1990; Bhatt 2003: 6).[45] In comparison, in cities like Bangalore, Hyderabad and Pune the share (slums and *chawls*) was significantly lower with 22.2, 29.9 and 38.8 percent respectively. Table 5.3 reveals the general tendency of distribution of slums and *chawls* across the city, with both the categories significantly concentrated in the East and North Zone.[46] About 50 percent of the slums are located on private land and 20 percent have encroached on government or municipal lands. The remaining 30 percent are on land held by semi-government/autonomous organisations such as railways or housing boards

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[44] In fact, the terminology widely used in all these surveys is not precise. It would perhaps help to use a definition such as: slums being deteriorated but legal structures. Then the *chawls* would fall into this category. Currently the slums in Ahmedabad comprise actually illegal or semi-legal occupation of land and hence are squatter settlements.

[45] This percentage is still the most cited number for the size of slum and *chawl* population in the city. Typically, the latest official data of the Census 2001 identify only 12.51 percent of the total population as slum dwellers (14.12 per cent national average). This is due to the restriction of including only slums with a population of more than 300 inhabitants. The latest survey, undertaken by the AMC, dates from December 2001 and counts only 708 slums and 958 *chawls* respectively.

[46] These numbers are based on a new calculation of the number of slums in the city, which is the reason why the total amount is less than in the 1991 study. In earlier counts slums which were larger and had more than one community were counted as separate units, even if it was one contiguous location. Now this has been abandoned and only locations are counted, no matter who is living there. This figure is official AMC data, and includes slums and *chawls* alike. There are about 325.000 hhs. (personal communication with Prof Bharti, 07/04/2005).

(Ahmedabad Municipal Corporation 2003: 59). The map in Appendix 4.4 shows the locations of slums in the city.

The population in slums has been growing faster than that of the overall population. The largest slums are to be found in a low lying area on the north side of west Ahmedabad towards River Sabarmati. These slums have no basic facilities as there is no drainage network (Dutta and Batley 2000: 41, Bhatt 2003: 6). Several studies demonstrate that the environmental and sanitation conditions in the slums and chawls are of serious concern. It is estimated that 500,000 slum dwellers have no toilet facilities (MBA 1996, FPI 1997; Dutta and Batley 2000). Drinking water supply is often inadequate in terms of quantity as well as quality. Many slums do not have sewage and drainage networks that connect to the city system. Only slums built before 1976 have water supplied through public stand-posts or individual connections, but later slums lack such facilities and have to acquire water from shallow hand pumps or elsewhere. Hence they suffer from water logging in monsoon, making slums a focus of epidemics and diseases that break out frequently. As the majority of slums is on private land, the Corporation is also not responsible for street sweeping and solid waste collection.

Table 5.3: Slums and Chawls in Ahmedabad

Zone	Slums (no. of pockets)	Chawls (no. of pockets)	Slums and Chawls (no. of pockets)
East	**52**	**406**	**458**
West	155	82	237
North	**129**	**303**	**432**
South	209	81	290
Central	163	86	249
Total	708	958	1,666

source: AMC Slum Survey - December 2001

Due to a variety of socio-economic factors that characterise slum and *chawl* populations, these belong to the most vulnerable groups in the city: "Muslims, SCs (scheduled castes) and OBCs (other backward castes) constitute 91 per cent

of the slum households, and more than 95 per cent of slum dwellers are migrants, indicating how rural poverty levels are now discharging into urban areas. Often fleeing rural inter-cast exploitation and debts, slum populations require their children to contribute to the household income. Victimized by the police, municipal authorities and the upper classes alike, this group represents a particularly vulnerable section of society" (D'Costa and Das 2002: 182).

D'Costa and Das (2002) studied vulnerable populations in 50 slums of Ahmedabad, and considered three dimensions, categorised into social, housing, and occupation as criteria to identify vulnerable groups in the city. As the findings show, both the groups in the two selected slum pockets for this study, the *Vaghri* and *Dalit*, are at risk especially as a social group but also on account of their occupation as construction workers, former mill workers and street vendors. Particular groups may be subject to one or more of the vulnerability factors. City-wide risks of the most vulnerable groups such as slum and pavement dwellers, SCs and STs include eviction, social exclusion, economic uncertainty (underemployment, no social security), communal upheaval, and endemic diseases.

The apparent failure of urban development planning and policies adds to the continuing proliferation of slums and their populations' eviction, thus creating a situation of high vulnerability of large sections of the urban population (Mahadevia 2002b: 90; AMC 2005: 79). In the past there has never been a political will to relocate slum dwellers in Ahmedabad, because they are considered a huge vote bank for politicians and therefore clearance decisions have been unpopular. Yet D'Costa (2002: 369) reports an increase of instances of eviction in Ahmedabad as a result of the globalisation strategy of the city government. D'Costa notes

that over a period of five years (1995-2000) at least six major evictions took place altogether displacing some 1260 slum households and pavement dwellers.[47]

Globalisation and social exclusion are aggravating already inherent inequalities in Gujarat and Ahmedabad, as the "mobilisation of funds through such institutional arrangements[48] has accentuated disparity in terms of per capita expenditure on services, as also in the level of amenities across the size class of urban centres within the fast globalising state of Gujarat" (Kundu 2002b: 174). While there has been a decline in urban income poverty in the state as a whole, urban poverty in Ahmedabad region is relatively high since this region did not receive much industrial investment during the late eighties and early nineties (Kundu 2002a: 123).

Over the decades many programmes have been launched to try to tackle the conundrum of slum and squatter settlements.[49] The most recent initiative, notably the Gujarat State Slum Policy, with a focus on urban local bodies as the main actors, is the first of its kind in India. The slum policy contains some interesting aspects with regard to the identified conceptual norms of communication. Seemingly the entire policy guidelines are drafted on the basis of the SNP experience in Ahmedabad, which sets out to promote the partnership approach for slum-upgrading, therefore co-operation and collaboration is at the centre of activities. Such an approach however, requires efficient communicative skills for the networking of various government agencies involved plus a commitment to pursue equity and social justice. The policy also recognises that eligibility for upgrading cannot be given if "lands [are] situated in known disaster-prone areas or on the locations which are hazardous in nature", demonstrating an attempt to integrate disaster risks into the broader development decision-making processes.

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[47] This issue of valuable land and eviction is further discussed with the concrete example of the Sabarmati Riverfront Development Project in Chapter VII.2.

[48] Privatisation, public-private partnerships, out-contracting, and the like.

5.2.3 Economic Stress

Due to its long history of trading and a distinctive business class, the city of Ahmedabad has had great importance in the economy of Gujarat (Gillion 1968, Tripathi 1984). Traditionally, growth of the economy has centred around the city of Ahmedabad as the prime city in Western India, second only to Bombay. This strong entrepreneurial environment reflects Gujarat's unique propensity for globalisation as a result of its historical links with international markets through migration of businessmen and their family-based interactions with the local entrepreneurial class (which was also evidently exhibited after the Gujarat earthquake in 2001). This exposure of the state's and city's economy to the American and European markets can be traced back to pre-independence (Tripathi 1984, Woiwode 2001), "The rapid growth of the manufacturing sector in the state, export oriented growth of the economy and the like, can be attributed to no small measure to the exogenous factors and the capital brought in by non-resident business community and their linked enterprises (Kundu 2002a: 123)."

The economy of the city has passed through phases of considerable transformation, during which the city has been experiencing both the new opportunities and the new threats of globalisation and liberalisation. Most strikingly is the change of its industrial base from the textile industry to the new pharmaceuticals and diamond cutting industries in the 1980s and early '90s (Spodek 2002). As Dutta and Batley (2000: 12) observe, "the textile industry loomed so large in the city's economy that its fortunes came to be linked with textiles." For lack of modernisation and structural reasons, the textile industry suffered a decline in the late 1970s and 1980s, making about 60,000 workers unemployed. Prior to 1985 there were 85 textile mills in the city, but in 1994 only 23 of them were functioning. In 1976, the industry accounted for about 80

[49] For an overview of slum policies in India and Ahmedabad see for instance Tripathi (1998: 4-17)

percent of the workforce and contributed 50 percent of the city's income (Bhatt 2003, Dutta and Batley 2000). By 2001, there were approximately 40,000 workers employed in some 480 textile manufacturing units (AMC 2002a)[50], indicating a trend towards small production units.

The lack of diversification in Ahmedabad's industrial base following the decline of the textile industries has been mainly responsible for the informalisation and casualisation of employment in the city (Kundu and Mahadevia 2002: 19). Following the decline of the textile sector and the stagnation in the organised employment sector, many informal small-scale industrial units arose on the periphery. As the case of Meladinagar shows, these brought about a new set of employment related risks such as the absence of employment contracts, health insurance and the unions to represent workers' interests. It also resulted in a new gender divide, for regular waged employment has increased for male workers whereas the risk for female workers to end up in self employment is becoming more predominant (Bhatt 2003: 4).

Though data of the growth of the informal sector are not very reliable and also include the District of Ahmedabad, in 1991 it was estimated that the informal workforce amounted to about 64 percent as against to approximately 50 percent in 1981. Dutta and Batley (2000: 27; 30ff) believe, such a change is plausible in the light of the restructuring of the textile industry and newly emerging industry. As the case study shall highlight, the impact of this economic transformation from a formal and relatively stable employment to its casualisation

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and Bhatt (2003).

[50] The numbers vary according to different sources, as only estimates can be given. Breman (2004: 143-45) states Ahmedabad had more than 60 mills in the late 1970s providing close to 160,000 jobs. Towards the end of the 1990s, after two significant waves of retrenchment in the 1980s and a slower continuation of the same in the decade following, 52 enterprises were closed or on the verge of it, and by end of 1996 the workforce had shrunk to about 25,000. Mahadevia (2002: 50) based on data from the Textile Labour Association (TLA) argues that from 170,000 full-time labourers were approx. 100,000 dismissed by 1996. Though this number suggests a higher workforce of about 70,000 workers left, the effects principally remain.

is very visible in many slums and *chawls* of the city, making it frequently more arduous for the residents to build assets and move out of poverty.

5.2.4 Environmental Degradation

5.2.4.1 Water Supply and Sewage Network

Major degradation of the urban environment is water pollution and shortage, air pollution and noise pollution (AMC 2003: 77). Water, especially drinking water, is a constant concern for the city. Access to drinking water has been the reason for various conflicts between the people and industries. Vagaries in rainfall and excessive withdrawal of ground water are major reasons for water scarcity. The level of groundwater has been decreasing over the last 30 years. This is accompanied by a constant decrease of per capita water availability characterised by a significant fall since the mid 1980s (National Institute of Urban Affairs 1994, AMC 2002a). High expectations rest on the Narmada Dam project to solve this problem for the city, as the first water from the project arrived in the city in 2002.

Domestic sewage in the city is treated in two water treatment plants[51] and released thereafter into the River Sabarmati (AMC 2005: 47, Sharma 1993: 13), yet technical problems and an increase of load results in a major part of the domestic sewage load being released untreated into the river, resulting in steadily increasing concentration of pollutants (USAID 1995: 22-23). Water sources in Ahmedabad have also been highly polluted by the chemical industries located particularly in Vatva and Narol. The majority of small, medium and large scale industrial units are chemical industries and textile mills which generate large amounts of chemical effluents (Centre for Policy Research 2001: 103).

[51] Another sewage treatment plant is envisaged in Vasna as well, which causes conflicts with adjacent residents.

Drinking water supply, sewage and drainage are still a large scale problem in the East Ahmedabad extension, which contains three large industrial development areas and many slums and *chawls*. When this area was integrated into the city limits in 1986, it had virtually no physical infrastructure facilities. Till today pumping stations and sewerage treatment plants do not have sufficient capacities. Inequality in water supply is a major issue in the city, as the affluent neighbourhoods access groundwater uncontrolled, whereas many slum dwellers are forced to pay their fellow citizens for water. These issues have not been resolved until now.[52] Ahmedabad has a high dependence on groundwater in the absence of perennial water sources, resulting in depletion of the water table at an annual rate of 2-3 metres (AMC 2003: 77).

This poses a serious problem for both availability and quality of water. On one side, the volume of water supplied at Ahmedabad is not commensurate with the network expansion. This is causing problems of water supply for the SNP and the other eastern wards and has resulted in a sharp decline in per capita supply. Reportedly, the duration of water supply was reduced from 10-11 hrs per day in the 1970s to 3.5 hrs per day in 1995 and merely two hours in 2004 (AMC 2005: 33). On the other side, contamination is seen to increase especially during the monsoon period with frequent sewage contamination of drinking water lines in certain pockets of the city, resulting in outbreaks of water-borne diseases. Besides, the overall quality of water has been noted as poor and about one third of households with water connections report contamination (Kundu, 2002b: 176).

5.2.4.2 Air and Noise Pollution

The air pollution in the city from vehicles continuously increases, and poses the highest health risk to the city's residents especially in the industrial and mixed-

[52] GREEN, Panel Discussion on "Groundwater Extraction and Commercialisation: where lies the limit?", Centre for Environmental Planning and Technology (CEPT), April 4, 2004.

use areas. A major source of air pollution is the large number of industries in the three GIDC industrial estates Naroda, Odhav and Vatva as well as the textile mills spread over the eastern part of the city. The highest concentrations have been measured in residential and industrial zones (Ahmedabad Management Association 1998). A study undertaken by USAID in 1995 found, the major contributor to the particulate load in the city is the industrial sector, which contributes to nearly 81 percent of particulate emissions.

The use of kerosene by scooter rickshaws also results in excessive emission levels, further degrading the air quality. The annual vehicle growth rate was estimated to be 15-16 percent in the mid 1990s, therefore emission is bound to have increased. Apart from air pollution, the indoor pollution from cooking fuels is a major health risk for the poor, who use alternative fuels like wood, cowdung, charcoal and kerosene and a mix of these. With nearly 41 percent of the city's households cooking needs dependent on these fuels, combined with almost no ventilation in the slum households, and coupled with low efficiency stoves, the indoor ambient air levels in low income households cause severe respiratory problems, especially amongst already under-nourished women and children population. By and large, "[p]artly because of the composition of its industries and partly because of rapid growth of vehicular traffic, particularly two wheelers, Ahmedabad has been rated as one of the most polluted cities in India" (Dutta and Batley 2000: 127).

As to noise pollution, most of the areas along the major roads in Ahmedabad are subjected to much higher levels than permissible limits, exceeding them by 12 to 22 dBA. For instance, areas on Relief Road and Gandhi Road (both the major arteries in the walled city) are found to be the noisiest, reaching noise levels between 87.5 and 86.5 dBA, and during rush hours (5-7pm) maximum

levels on these roads reach 110 dBA.[53] Consequently, the City Development Strategy for Ahmedabad states: "It is estimated that 21 percent of Ahmedabad's population live in close proximity of the major transport routs and hence are exposed to noise levels of most severe consequences" (AMC 2003: 81).

5.2.4.3 Inequality of Public Services

A disproportionate distribution of environmental risks is also evident, "[w]ith the majority of slums concentrated in the eastern part of the city, the differences in the level of basic services (such as water and sanitation) in the eastern and western areas are so striking that, along with economic polarisation, these have come to be identified with polarisation of environmental quality as well" (Dutta and Batley 2000: 130). Severe distributional problems in these facilities, both spatially and across income groups have not changed much since the 1990s (Mehta and Mehta 1993). In 1998, approximately 70 percent of the population had access to water supply and 61 percent to sanitation in the urban agglomeration, i.e. 30 percent and 39 percent of the population were without access to water supply or sanitation respectively. This distribution, however, is unequal, since 30 percent and 50 percent of the population living in east Ahmedabad and the eastern periphery do not have access to water supply. This infers that 80 percent of the population with no water supply lived in the eastern parts of the city. Within the slums, water availability is still very low as about two thirds of the households depend on public water taps or alternative sources (Mahadevia 2002b: 97).

The condition of public health features as a salient indicator of a society's development and wellbeing. In Ahmedabad though, high mortality due to communicable diseases and malaria exhibits a negative picture, because the slum population is increasing rapidly in the urban areas and inequality is seen

[53] Maximum noise levels as per Central Pollution Control Board are: industrial (75, day; 70 night), commercial (65 day, 55 night) residential (55 day, 45 night) and silence zones (50 day, 40

between the services available to the privileged elite and the underprivileged slum dwellers, achievements in public health are almost nullified. Thus basic health services have not reached the urban poor to the desired extent (AMC 2002b). The ward-wise disease pattern in the city clearly indicates a high incidence of all water-borne diseases in the central, south, north and eastern zones of the city with low to moderate incidence in the western zone (USAID 1995: 57).

5.2.5 Natural Disasters

Ahmedabad reflects on a smaller scale the multiple natural hazard conditions of Gujarat. Because of its geographical location, Ahmedabad is prone to four natural disaster risks, earthquakes, cyclones, floods and droughts. Their occurrence, however, is not confined to the city. Particularly earthquakes and floods are connected to the region and the built-up environment at large.

In 2000, both flood and drought overcame the city and the state, arriving so suddenly that the Times of India (Ahmedabad) reported "a cloudburst turned a drought into a flood situation overnight" with the "heaviest shower in memory" (ToI, "Record Rainfall in the City, Life Disrupted", 15/07/2000). Interestingly, this flood affected all areas in Ahmedabad including industrial estates, slums, and not sparing the wealthy neighbourhoods like Satellite, Paldi and the main commercial C.G.Road in western Ahmedabad (ToI, "City-bred get taste of the wild", 19/07/2000). A separate storm water drainage system is in place only in the walled city, and as the AMC has not considered it in its development planning schemes, the flooding could extend to the western parts as well (ToI, "AMC tight-lipped on flooding of city roads, 15/07/2000).

The enormity of impact can be at least partially attributed to inadequate land use zoning and ignorance of the topography. Many former lakes and tanks within

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night).

AMC and AUDA limits were reclaimed for settlement development because in the past they were almost dry throughout the year. Originally Ahmedabad and its surrounding area had more than 300 lakes of which only five to six are left today. Therefore no recharge can take place and the water comes in a flood-like manner every year. Requiring only one or two days constant rain in monsoon leaves the city standing in water up to six feet deep.

Consequently it is not rivers that flood the city, but the rainwater which has no opportunity to percolate but to flow off to its natural basins. In western Ahmedabad's new, well-off settlement areas like Vastrapur and Satellite the prices for housing have already fallen due to this. Not only squatters who settle in such areas are affected but officially legalised housing estates as well. Even such prominent institutions as Gujarat University and Gandhi Labour Institute are built on former lakes. But there are further repercussions of building on the lakes. As mentioned above, Ahmedabad has a severe problem with water supply and depends to a large extend on borewells which go down as deep as 1000 feet to reach groundwater level. Since the groundwater level is falling constantly these lakes ought to have been kept free from settlements as another potential source for drinking water.

The Gujarat earthquake, January 2001, struck the state with the worst tremors since the last quake in 1956, leaving an estimated 30,000 people dead and 200,000 injured or otherwise affected.[54] Although the remote Kutch region with many villages, small towns and its capital Bhuj were closest to the epicentre and had suffered the highest losses, the major urban centre Ahmedabad came second with its share of the disaster among the urban settlements. Like many other urban areas, Ahmedabad also suffered damage to major structures, infrastructure and industrial facilities (NCDM 2002: 45). Devastation was severe with some hundred collapsed high-rise buildings and about 14,000 injured people

congesting the hospitals[55] ("India Quake Victims Wait for Relief"[56]). The estimated death toll exceeded far more than 500 people ("Quake Toll Crosses 7,000 by the latest Count"[57]).

In the wake of the earthquake, the Central and State Governments together with local and international aid organisations, had launched one of the largest relief and rehabilitation endeavours on Indian soil. Among these was a 'Special Human Welfare Programme for Municipalities' in which Ahmedabad received grants of Rs.50 million for rehabilitation of people of earthquake affected houses. Nonetheless, in 2002/03, many high-rise buildings full of cracks were still standing and inhabited in the fast growing western part and periphery of the city. Due to the population pressure and lack of financial resources, these buildings were not demolished, but the damage merely plastered over. Many of the former residents had moved out into safer apartments, and less affluent people had moved in. In this way a process of degradation had set in, with the vulnerability being passed on down through the social strata. Obviously, both the disasters highlight one important aspect. Under given circumstances, disasters of this kind and scale increasingly affect the affluent sections of the society as well as the poor. The boomerang effect, as Beck (1992) labelled it, demonstrates a presence in the form of the neglect of zoning, building and construction regulations. In so doing, the actual character of natural disasters and the underlying human-made conditions, are revealed.

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[54] As so often, the variety of numbers is great, and ranges from approx. 13,000 to up to 50,000 casualties (Kropac 2002).

[55] Again, it is only possible to estimate actual losses due to a variety of calculations. According to the Dy. Town Planning Officer, AMC, only two high-rise buildings collapsed, while approx. 70 mid-size buildings (G plus 4 floors) collapsed (Mr Chauhan, 21/01/2003). Other reports speak of 300-500 multi-storey buildings. Apart from this inaccuracy, typically no official data are available for slum areas. There has not been a systematic damage assessment in the slums, with the effect that the majority of slum dwellers did not receive much compensation.

[56] www.in.news.yahoo.com/010127.

[57] www.in.news.yahoo.com/010127.

5.2.6 Social Tension

At first sight, for many onlookers communal violence in the state of Gandhi must seem like a paradox. Nevertheless, Ahmedabad with a share of 13 percent Muslim and 82 percent Hindu population has been a centre of repeated rioting in the state.[58] Historically, the centres of Hindu-Muslim conflict were essentially an urban phenomenon, at least in Gujarat (Yagnik and Sheth 2005: 224, 232, 234; Appendix 4.3). For many people the fury which happened in the cities of Gujarat triggered by the burning of Hindus in a train on February 27, 2002, still remains incomprehensible. Even more so as this occurred in one of the economically foremost Indian states whose people are generally known as successful traders and businessmen. Furthermore, here people are well known for their mild and non-violent behaviour and cultural ideals (see Tambs-Lyche 1997) with Mahatma Gandhi being the most famous national exponent of peaceful protest and icon of non-violence.

Even though this heritage does still exist, it seems to be deteriorating: "Ahmedabad is full of Gandhian workers. No one so far has shown any willingness to go on fast as Mahatma Gandhi used to do on such occasions [riots]. So the weakness of secularists has become the strength of communalists" (Engineer 1999: 270). Endemic violence and decline of conflict resolution mechanisms have replaced a formerly consensual attitude that astonishes the observer, "[f]or a city credited with a long association with Mahatma Gandhi and institutions known for their secular and human values and a hold at grass root level (through such as TLA), to have suffered more than any other city with communal violence at regular intervals seems ironic" (Dutta and Batley 2000: 69).

Obviously, the city is under a dynamic and far-reaching transformation process from an old industrial centre based on textile mills to a modern service

[58] Communal violence in Ahmedabad is reported to have broken out in 1941, 1942, 1946, 1956, 1958, 1964, 1969, 1974, 1981, 1985, 1986, 1992, 2002 (Dutta and Batley 2000).

metropolis with nationally and internationally known academic and research institutions. The city is, like many others in India, adjusting to the economic liberation politics which began in the early 1990s. The latest riots can therefore be considered as a reflection of the current socio-economic and political situation in the city and the state of Gujarat. I will not delve into the details of the actual events, as there is a considerable literature on the issue (e.g. Varadarajan 2002). However, it is illuminating to look at the areas in the city where the riots concentrated. Roughly three larger areas hit by violence can be identified:

a. the outskirts: Bapunagar, Behrampura, Juhapura, Naroda, Meghaninagar, Rakhial, Vejalpur,
b. old city areas: Kalupur, Dariapur, Shahpur, and
c. some other city areas: Chamanpura, Shaherkotda.

Of significance is that the bulk of activities occurred in areas at the fringe and the outskirts of the city. These are those that are changing rapidly in their physical and social structure, for these areas are the least consolidated. They are often characterised by a high population of (immigrant) workers that inhabit new and old industrial sites. Some areas like Meghaninagar, Rakhial, Bapunagar as well as the city areas Chamanpura and Shaherkotda are in the immediate vicinity of the old textile mills which have faced a deep crisis since the 1980s. Therefore the situation in those areas is very tense, because thousands of people have become unemployed. Ever since the establishment of the first mills in the late 19th century there have been large slum areas as well as the *chawls*, which are in very dilapidated conditions and, like the slums, suffer from poor services.

Seemingly there is a strong correlation between spatial and socio-economic factors which determine the course of violence in the city. By and large, even in this case the city was divided with the east being the centre of violent attacks. It is

essential to understand where these riots and the social disorders occurred and what is the social composition of the neighbourhoods' population. History reveals that most of the localities mentioned above are notorious trouble zones. In Indian cities, this element gains special importance since they are traditionally segregated according to caste, religion and/or occupation. The walled city of Ahmedabad with its specific introverted neighbourhood structures called *pols*, provides one of the best examples. Even today the segregated aspect cannot be wiped out in other parts of the city. For instance, mainly Muslim localities are Jamalpur, Rakhiad, Khamasa and Saraspur, with the riots of 2002 resulting in further ghettoisation of the Muslims in the city.

Modern economic development seeks to create major cities, which are far from homogeneous in character. Sandercock (1998) argues, the resulting diversity produces and reinforces the risk of communal violence in cities, as it is specifically there where different cultural groups congregate. This would add a new dimension of urban risk to many cities, which see themselves suddenly confronted with the "dilemmas of difference", because "[t]he multicultural city/region is perceived by many as more of a threat than an opportunity. The threat is multiple; psychological, economic, religious, cultural. It is a complicated experiencing of fear of 'the Other' alongside fear of losing one's job, fear of a whole way of life being eroded, fear of change itself. These fears are producing rising levels of anxiety about and violence against those who are different, who are seen as not belonging, 'not my people'" (Sandercock 1998: 3). This applies to Ahmedabad. As a result of the riots, the city was losing economic potential. As mentioned earlier, many first generation immigrants live in Ahmedabad who brought in a vigour which unfortunately the city has not utilised, because immigrants are still viewed as a burden by politicians and policy makers, perhaps even as a risk to the urban structures and the system.

While cultural diversity is not a new phenomenon in Indian towns, cities like Ahmedabad, Baroda and Surat are fast expanding with incoming migrant workers.[59] Frequently, all over the world such rapid urbanisation results in proliferation of slums, rising crime rates and violence (Moser 2004). In an Indian context, it also assumes caste and communal dimensions, namely the disadvantaged groups like Muslims and Dalits are found more in urban crime (Engineer 1995). Urban violence, thus, is caused by transformational dynamics with multiple root causes, which are translated into local politics to gain dominance and power (Brass 2003). Identity is one such significant factor, as Hansen (2001) points out in his study on transforming Bombay into Mumbai. Urban centres are nodes of multiple identities, "of social imaginaries, of desires of recognition", he argues. Remarkably, identity politics regarding the renaming of Ahmedabad into Karnavati have failed to take hold (ToI, "Ahmedabad is Karnavati, only in Speeches", 01/02/2004).

Another conspicuous cause is rooted in cultural transformation in form of caste assertiveness and competition which changes caste relations, dominant values, politics and economics of Gujarati society. For centuries Gujarati society has been dominated and deeply influenced by the *Bania* merchant ethos. The late 19th century witnessed the beginning of the rise of a new entrepreneurial class. However, particularly in recent decades it appears to have been a significant weakening of the traditional business communities within urban politics including their ethos of providing welfare. The emerging new entrepreneurs and businessmen coming from diverse social backgrounds have rendered a kind of social and economic control on the effectiveness of traditional institutions. Nowadays, these new businessmen have a strong and ruthless attitude in both politics and in doing business (Yagnik and Sheth 2005: 238-41).

[59] In 1999, about a quarter of Gujarat's urban population were migrants with ongoing high rates of inmigration from other states such as Assam, Bihar, Uttar Pradesh, Rajasthan (Kundu 2006: 118-119).

Traditional ties between the old business class and their customers and workers, often described and looked on as a patron-client-relationship, are observed to be declining while new, uncertain labourer-employer relationships evolve. This development is apparent in the overall decline of civic life in the city, which becomes increasingly politicised along caste and religious lines, dissolving the cross-societal bonds as formed by Gandhi, notably the Congress, TLA and the traditional businessmen (Varshney 2002). Hence, while the 'Merchandisation' of Gujarat is probably vivid as never before, the 'Baniaisation'[60] (Tambs-Lyche 1981) seems to be waning. As a result, a novel and coherent set of values, less confrontational and integrating various social groups and classes, has to be found and developed; that must also include new ways of resolving conflict and the negotiation of interests.

The poor are consistently used by politicians for their voting potential. For example, the overall voting rate in the city is only between 18 and maximum 40 percent, it being predominantly the lower echelons of the society who vote. The latest riots can thus be conceived as an outcry of the poor against the worsening employment and social conditions in the city, an expression of the deprived situation of at least half of the city's population. Since in slums the population often belongs to the same social group, there is always an ethnic, communal or religious dimension. Hence, these entities become a 'collective force', as one informant called it, which is effectively abused by politicians. Viewed in this light, the composition of the slums poses a dangerous situation for the city as a whole, yet in particular to the residents of the slums themselves.

[60] Tambs-Lyche (1981) introduced this terminology as a cultural phenomenon referring to 'sanscritisation' in terms of imitating *Bania* values.

5.3 Conclusion

This chapter has shown that risks and vulnerability of Ahmedabad are multi-fold. Ahmedabad has been undergoing a dramatic process of transformation with deep impacts on its cultural and socio-economic base at least for the last two decades. This has led to a decline in the institutional establishment of the city's civic organisations and the textile sector. Consequently, the vulnerability of underprivileged groups in the city has increased particularly with respect to further social exclusion and inequality on account of local politics and policies of urban governance. After all, despite its economic prowess and accelerated endeavours of modernisation of the city and the state, urban culture in Ahmedabad at large remains conservative in that socio-cultural borders are consciously guarded.

Characteristically, the city divides into a relatively more vulnerable eastern Ahmedabad with a less affluent vernacular population, and the wealthy, modern-oriented, westernised population in the west of the city. Reasons for the occurrence of these hazards have to be sought in the rapid growth of the city in terms of population and its spatial expansion in the 20th century. In spite of the fact that earthquakes and floods have also increasingly affected the upwardly aspiring middle classes in their multi-storey homes, it is still the poor who are most at risk. They are regularly more affected by flood, by riots and other violence, the economic recession, and inequitable distribution of urban infrastructure facilities. Such is the urban environment against which the following case studies must be analysed.

On a national level, the discourse on risk management in India is hitherto coined by the natural disaster risk debate as promoted through IDNDR, which stresses upon and around natural disasters as the major concept to approach their management. Typically, the discussion concentrates on the three stages of preparedness, disaster, and rehabilitation. According to the origin of the subject from a discourse on natural disasters, in this debate natural hazards and

environmental issues are centre stage, and only from this perspective related to other aspects such as the economy or society. This lopsided perspective also explains why economic aspects (e.g. globalisation) and communal violence are mostly conspicuous by their absence from the debate. In contrast, with the socio-cultural risk discourse the leading concepts are society, culture and human beings with a focus on the holistic perspective of relevant issues (see conceptual framework). Hence everything must refer to the dimensions of the human body, or otherwise interpreted, the society. Ultimately, such a notion has the advantage that other related issues, environmental hazards, health hazards, socially and culturally rooted hazards, are treated more equally. The cases of slum dwellers presented in this study crucially exhibit this dimension when looking at micro-level analysis, consequently supporting the need for such a conceptual shift in (disaster) risk management.

Chapter VI

Risk Scenarios in Two Slum Settlements: Poverty, Deprivation and Globalisation

"People in India are poor, but India is always great because of our culture."
(Kalubhai, Resident and Leader in Nitinagar)

"*Dhunyano chchedo ghar.*"
('The end of the world is one's home', proverb invoked by Meladinagar residents)

VI. Risk Scenarios in Two Slum Settlements: Poverty, Deprivation and Globalisation

6.1 Introduction

This chapter investigates in depth two of the research objectives outlined in Chapter I, notably understanding poor communities' perspectives and experiences of urban risks as well as the examination of the knowledge and rationality in the communities' coping mechanisms. Following the understanding of 'risk' as conceptualised around the four major building blocks *probability assessment*, *incomplete knowledge*, *cultural values and norms*, and *social construction* (Chapter III), the presentation of data emphasises the web of interrelations of risk conditions and the factors that constitute risk spheres in two slum settlements.

6.1.1 The Settlements: Nitinagar and Meladinagar

Nitinagar was established in 1969 on private land using a layout in a planned character with rectilinear roads and division into plots (map 6.1).[61] A survey conducted by UPP/FPI[62] for the SNP counted 108 houses with an estimated

[61] For a map drawn by residents of Nitinagar refer to Appendix 5.3.

[62] The survey, conducted on behalf of the AMC for the SNP in about 50 slum areas to prepare for the upgrading, is not published. The findings are fed into a GIS database and linked to the map that is also presented here. This is a quite recent activity, hence all slums that were upgraded earlier until 2002 are not (yet) surveyed, among them Meladinagar.

population of 320 inhabitants.[63] It should be noted though, that not all of these plots are inhabited. Most of the houses can be counted in the category semi-*pacca* with a significant number of huts made from wood, corrugated iron, and even jute. In the entire area only a few *pacca* buildings exist. Since the area has not yet been upgraded by the SNP it has only inadequate public water taps and waste disposal, and no other facilities like toilets, sewerage, or storm water drainage.[64]

The immediate vicinity of Nitinagar underlines the overall character of this location on the expanding eastern fringe of the city. Many parts in this area have only recently become incorporated into the built-up city. One indicator for this is the four-lane main road which had been a by-pass earlier but has since become a part of the city. This wider area is a noisy mix of lower-middle class residential units and local small-scale industries and workshops, plus some villages that have been absorbed by the city's expansion. The contrast of the quality of this growth is stark when compared to that of the western edge of the city with sophisticated cinema and shopping complexes, hotels and office buildings for the striving middle and upper classes.

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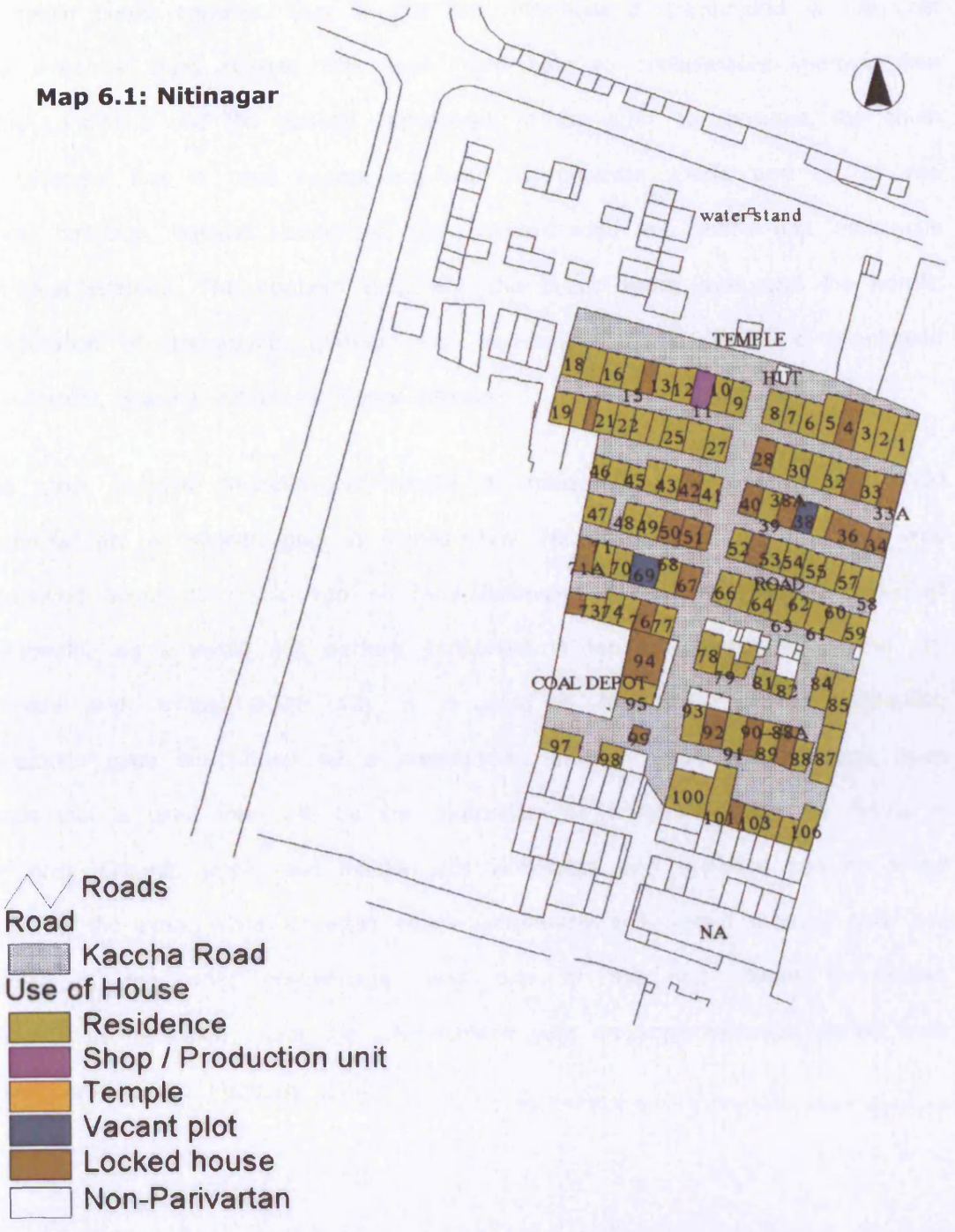
[63] The survey gives a total of 320 residents (127 males, 123 females, 70 children), but this appears to be quite low, and when I questioned some of the NGO workers, they estimated approximately 500 residents. In general these survey data have to be met with care. Frequently they do not coincide with my own experience, for example some of the plots registered as 'other than household' were inhabited huts at the time of my research. This limitation of the survey data is also visible in the maps, in which some plots are missing data, which renders assessment of correlations difficult or even impossible (for instance income and type of house).

[64] Nitinagar was upgraded under the SNP in the year 2004 after the fieldwork was completed.

Map 6.1: Nitinagar



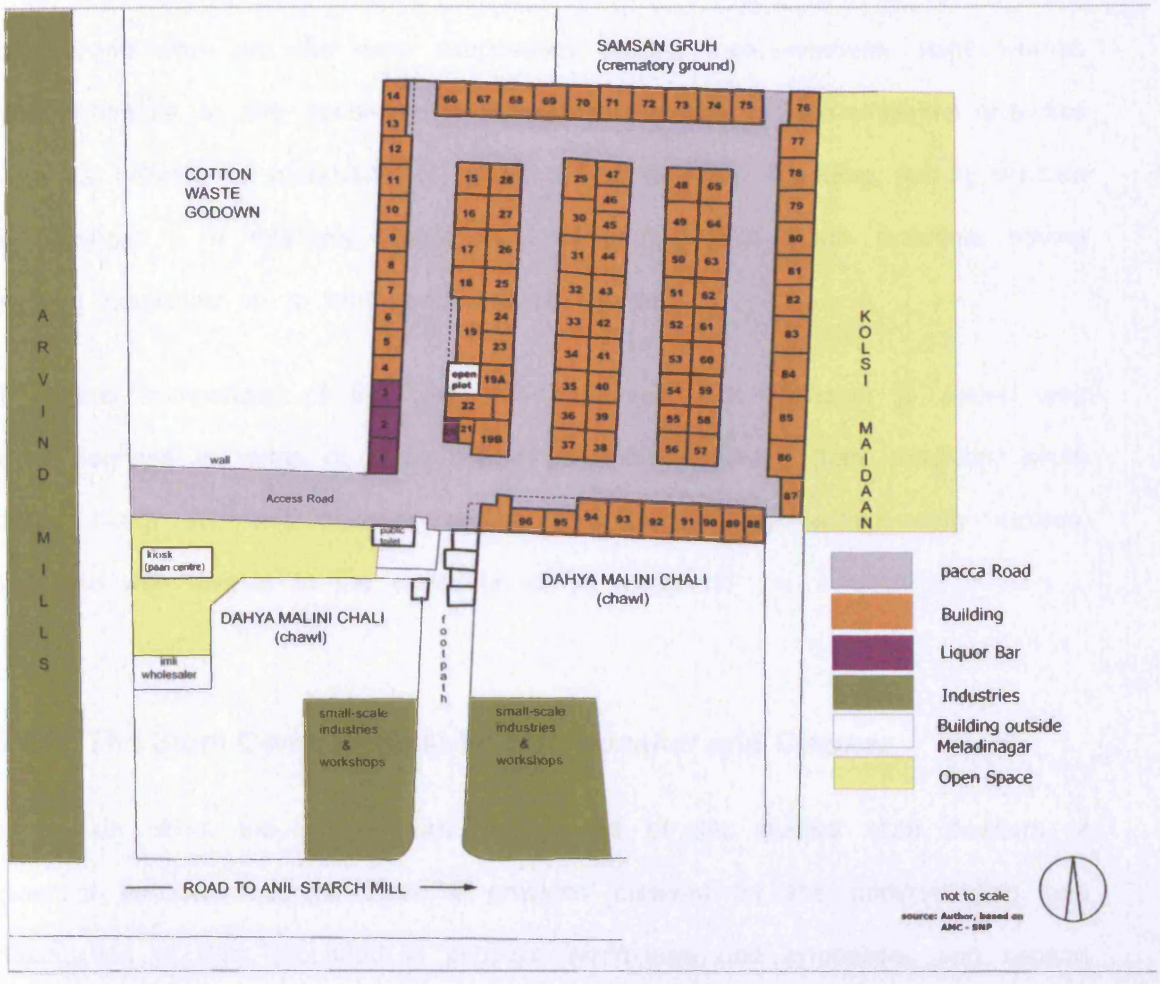
VI. Risk Scenarios in Two Slum Settlements

Pragatinagar, the area east of Nitinagar, was only upgraded recently. With a neat and new look that contrasts significantly to Nitinagar. Another neighbourhood bordering Nitinagar in the west is Motibhai Mukhi ni Chali, which also managed to obtain public services. Due to this fact, Nitinagar is surrounded in the east and west by slum pockets that have been able to considerably improve their living conditions and the general appearance of the area. By contrast, the south of Nitinagar has a rural appearance with its unpaved roads and up to two storey buildings. Besides residences, this adjacent road has shops and workshops for local supplies. The northern end, with the public water taps and the horrific combination of playground, garbage and defecation ground, faces a dilapidated government housing estate for police officers.

The other location, Meladinagar, houses 98 households with approximately 500 residents on a similar grid of lanes like Nitinagar (map 6.2).[65] The area developed about 20 years ago on land belonging to the Ahmedabad Municipal Corporation as a textile mill workers settlement in the industrial heart of the city (Tripathi and Jumani 2001: 42). It is sited in the midst of non-residential, hazardous uses surrounded by a crematorium in the north, and a large open space that is used *inter alia* by the corporation as a dumping site for debris in the east. *Chawls*, small- and middle size workshops and factories can be found south of the area, while a cotton waste warehouse and Arvind (cotton) Mills are located in the west. Meladinagar was one of the first slums to receive infrastructure provision under the SNP-scheme with an implementation period from November 1997 to February 2000.

[65] For a map drawn by residents of Meladinagar refer to Appendix 5.3.

Map 6.2: Meladinagar



Further details about the residents of Nitinagar and Meladinagar were acquired from the data derived from participants of the participatory sessions. Two 'Baseline Matrices' contain among others area specific data with respect to household size, occupation, income, education and ownership.[66] These matrices are displayed and commented upon in Appendix 5.1 and 5.2. In Nitinagar most adults (male and female) are engaged in some sort of business, vegetable and fruit vending, collection of scrap or second hand clothes, which is frequently

[66] There are no other data available for Meladinagar, since a survey as conducted for Nitinagar by UPP for implementation of SNP was not systematically done by the AMC at that time. According to Tripathi and Jumani (2001), in the second phase of the SNP the AMC did not even undertake physical surveys in all slum areas on the grounds that the small size does not require it for designing purposes. Therefore hardly any data (such as maps) are available.

referred to as casual labour. In contrast, occupation in Meladinagar is divided more along gender roles. Casual labour in textile mills or diamond factories and construction work are the main occupations among men, whereas many women who contribute to the household income are engaged in self-employed activities such as tailoring or production of tamarind sweets (*imli*). Standing out in contrast to Nitinagar is a relatively higher level of literacy with some residents having enjoyed education up to tenth and eleventh grade.

A general comparison of the two areas suggests that Nitinagar is poorer and more deprived in terms of infrastructure provision, buildings (bad condition, semi-*pacca*, huts), the household equipment (vehicles, cooking facility), daily income, and also with respect to the education of its residents.

6.1.2 The Slum Communities: *Vaghri*, *Vanakar* and *Chamar*

Information about the socio-cultural background of the studied slum dwellers is essential for two reasons. First, it provides material for the understanding and construction of risks grounded in people's worldviews and symbolism, and second it tells us something about their standing and its cultural connotations within the entire society, which may assist in explaining their communicative relationships and interactions outside their own community.

The residents of Nitinagar originally came from North and Central Gujarat and belong to the *Vaghri* community, which is classified by the government as a Scheduled Caste (SC)[67]. Notwithstanding though the majority of residents were born in Ahmedabad. The average duration of residence in the area is just

[67] Other Backward Castes, Scheduled Castes and Tribes are classifications chiefly for administrative purpose, in particular in terms of quota regulations for depressed classes. Practically, they comprise a heterogeneous stratum of primarily tribal and untouchable communities that vary from region to region (see Ahuja 1999).

above nine years, with some households having been there for up to twenty years. Nitinagar displays a great deal of homogeneity in terms of the origin of its residents and the inadequacy of income levels, where there is hardly any disparity. One indicator of this fact is the low number of *pacca* buildings, usually a sign of more prosperous households.

Werth (1996) mentions the term *Vaghri* is found in Gujarati and Rajasthani, denoting a group of castes rather than one social unit who have a north Indian origin and their own language, which is related to Gujarati. Werth identifies them as a separate social entity within Indian society, since they are considered the gypsies of the Indian subcontinent, and for this reason they traditionally live on the margins of society. The stereotypes associated with this community appear to be strongly negative. They were frequently associated with criminal activities (Government of Gujarat 1984: 604) and even perceived with the connotation of uncleanliness. Pocock (1973: 43) reports an incident in a Gujarati village during the 1950s where *Vaghris* came as seasonal visitors: "The Vaghari are local people whose name is almost a synonym for personal dirtiness and extreme lowness of caste." Pocock recounts another story told by a woman: "[S]he once told me how she had eaten at a railway station in a room where a Vaghari was present. The sight so upset her, she insisted, that she had been sick all the way home" (Pocock 1973: 43). Understandably, *Vaghris* themselves do not comply with these notions, placing themselves in *Kshatriya varna*[68].

Nonetheless it is usually acknowledged that *Vaghris* are not regarded as untouchables. Werth (1996: 81) concludes that the key to the extremely low social status of *Vaghris* is their marginality. They do not have a fixed position

[68] The second strata after the priests (*Brahmin*) according to the fourfold caste (*varna*) ideology. According to ancient Vedic ideology society is stratified into four classes, called *varna*: *brahmin* (priest), *kshatriya* (ruler, warrior), *vaishya* (merchant, farmer, artisan), and *shudra* (servants). Untouchables stand outside this classification as the lowest class.

in the local caste hierarchy, but are outsiders. The reason why they are often ostracised is their marginality combined with an appearance that totally contradicts Hindu notions of purity, since they do not have duties according to the caste ideology which are associated with impurity and define untouchability, as for instance the *Chamar* in Meladinagar who were leather workers.

Two communities, the *Chamar* and *Vanakar*, are represented in Meladinagar. Both are considered untouchables, the social category with the lowest standing in the hierarchy of Indian society.[69] Most of the residents are (descendants of) migrants originated from Saurashtra, the peninsula in western Gujarat and other places near Ahmedabad. They have been classified by the government as scheduled castes (SC).[70] Among the Hindu majority are a few Christian families, converts in their first or second generation, which practise a blend of Hindu and Christian customs.

Vanakar means weaver and signifies their traditional profession. In Ahmedabad District they predominate among the scheduled castes (Government of Gujarat 1984: 206) and are known as *Dhed*, a term used all over Gujarat for untouchable castes in general. The *Chamar* derive their name from the word for hide, *chamra*, a reference to their original occupation of tanning, skin-dressing and shoe-making which renders them untouchables.[71] *Chamar* are distributed in

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[69] See Footnote 68, page 177.

[70] All untouchable castes were technically classified as scheduled castes when untouchability was outlawed by the Constitution, but not all SCs are former untouchables. The term *Dalit* is also used for scheduled castes (Ahuja 1999). See also Footnote 71.

[71] Untouchability is the most extreme way to consider someone an 'outcaste'. It means 'do not touch, keep separate, keep distant'. Untouchability *per definitionem* is a social stigma which manifests itself in all walks of life, primarily because the rest of the society is greatly concerned about purity which means they permanently keep untouchables in a state of economic, social and political subordination. Therefore the concern with ritual pollution is not limited to the role of untouchables. Rather it is a matter of power, which also serves to keep untouchables in an inferior economic and political position through physical separation. Arguably, conditions have slightly changed in the urban context, in particular the borders between caste and class are often

almost all districts of Gujarat. There are several other names such as *Khalpa* (means carcass) and *Bhambi*, which are sometimes considered as synonyms for *Chamar* (Enthoven 1920, Singh 2003: 159, 276). However, they claim to be of *Shudra* status, which would incorporate them into the four-fold Hindu society.

In comparison, while the *Vaghri* stereotype is based on their marginality on grounds of their underprivileged social status, the defining criterion of the low status in the case of *Vanakar* and *Chamar* is their untouchability. Besides caste, various other elements are commonly regarded as indicating a low social status in Indian society. The custom of bride-wealth as it is found among *Vaghris* is conceived by high caste Hindus as a tradition of lower castes. Similarly, the fact that divorce and remarriage are allowed also contribute to such an idea. I also observed that many of the women chew tobacco, a custom perceived by many Gujaratis (and all over India) as the behaviour of low caste people. The consumption of alcohol seems to be part of the culturally accepted customs of the *Vaghris* much to the contrary of the values of the majority population in Gujarat.[72] This attitude towards alcohol in *Vaghri* communities and the contrast with the rest of wider Gujarati society must be kept in mind when they speak of alcohol addiction.

As noted earlier, status, identity and outsider images have considerable influence on communication. Transformation of the image by changing social norms and

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blurred. Although the impacts have decreased to a large extent, "[a] large number of *Harijans* suffer from an inbred inferiority complex which makes them sensitive to any treatment which they think smacks of discrimination" (Ahuja 1999: 83).

[72] Alcohol or liquor also appears in the legends about the killing of the buffalo demon. Liquor thereby is an integral component of the sacrifice which follows the victory over the demons (see Werth 1996: 328). Moreover, a general link exists between meat eating and alcohol in the context of goddess worship, because "[...] spirituous liquor is a constant accompaniment to the blood offering" (Kapoor 2002: 120, also pp. 162, 164-67). The reason is that the goddess herself eats meat and consumes alcohol, and this is symbolically reenacted during the sacrifice. Hence it is usually the dark and fierce forms of *devi* such as *Kali, Durga, Chamunda, Vihaat* etc. (i.e. the demon killing goddesses) that are connected to blood sacrifice and liquor.

cultural values is one way disadvantaged groups attempt to counteract stigmatisation. Thus the residents of Nitinagar are anxious to change their image by turning towards vegetarianism, abstaining from alcohol or changing marriage practices. I have never seen anyone gambling or drunk in public, nor consuming meat. It appears in focusing on these values, the neo-*bhakti* movement *Svadhyaya*[73] brings the *Vaghris* unavoidably closer to the cultural mainstream of Gujarat, which is dominated by ideals such as non-violence (*ahimsa*) and vegetarianism.

In Meladinagar, I encountered two instances that may point towards a similar attitude of changing their image. The people referred to *dahej* unmistakably only as dowry, whereas the literature speaks of bride-wealth as the marriage regulation regarding the two caste groups. Perhaps it is a result of their life in the city, and a way of adjusting to a much more popular custom.[74] Whether this has to do with Sanskritisation cannot be definitely confirmed (Srinivas 1998). Another detail made me even more attentive, namely the practice of renaming.[75] In a talk with my Gujarati teacher about my data he discovered that the surname *Kapadya*, given by one woman in the data entry form for the participatory session, can not be the original one. He explained low caste people would sometimes change their name, which would be a common practice indicating aspirations for a socially upward move. The woman, however, gave as

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[73] See the Glossary for a brief description. Little has been published on this movement. Srivastava (1998) seems to be the only comprehensive treatment, others are Sheth (2002) and a series of lectures by the founder Athavale (1998). It is beyond this study to go into depth of the implications and influence this movement has on the people. Therefore I mention it in the relevant context in which the people referred to it.

[74] Sharma (1998: 348) notes: "Nowadays, dowry is increasingly adopted by low castes and impoverished groups who formerly paid bride-wealth, but the shift to dowry does not always seem to be related to any withdrawal of women from productive labour."

[75] Gandhi was also well aware of this fact, and attempted to raise self-esteem as well as generating a positive consciousness on the issue of untouchability by renaming untouchables *Harijans*, 'Children of God'.

jati the term *Vanakar*, thereby disclosing her position in the social hierarchy. *Kapadya* is a name of *Jain* cloth traders, deriving from the word for cloth, *kapda*.[76] While my data cannot verify this specifically without doubts concerning Meladinagar, since this issue is not the focus of my study, it is known that both *Vanakar* as well as *Chamar* have been upwardly mobile castes among *Dalits* in Gujarat in the recent past (Spodek 2002: 225).

6.2 A holistic Perspective of Risk Conditions

The following interpretation corresponds with the matrix 6.1 presented below, which show risk variables of Nitinagar and Meladinagar.[77] It enables to detect relations and the intensity of these relations between conditioning indicators (e.g. 'monsoon', 'indebtedness'). This method offers a concise and combined overview of the issues perceived by the slum dwellers. In total seven risk spheres were identified through depth interviews together with 26 conditioning indicators.[78] The matrix explores the significance of issues that were mentioned by interviewees during the participatory sessions and depth interviews. These issues condition a risk sphere, so indicating the perception of the interviewees. Besides, the matrix

[76] The *Jains* are a distinctive group of *Banias*, the term for the traditional merchant castes of Gujarat. *Banias* occupy a high position in the caste hierarchy, and much of today's Gujarati culture has its roots in their values, not least thanks to Gandhi (who was a Hindu *Bania*). Perhaps this woman tried to utilise the *Bania* image for upward mobility. *Baniaisation* as defined by Tambs-Lyche (1981), the Gujarati equivalent to *Sanskritisation*, is the acceptance and diffusion of these *Bania* values such as non-violence and vegetarianism by low caste people in order to assume higher status. Under urban circumstances with more impersonal contacts, it is not instantly possible to detect one's status, and even less so if the surname has been changed.

[77] For an aggregated matrix see Appendix 5.5. The page can be opened and kept outside as a reference when reading the following text.

[78] These categories were generated from informants' statements in interviews and the participatory workshops.

describes the intensity of each indicator on the basis of the frequency of references in the interviews and participatory sessions.[79]

For improved reading, the value of different indicators was transformed into a system of three different intensities. The intensity indicates a relative value within each risk sphere giving the strongest value to the indicator with most references in a risk sphere. For instance, the indicator 'insecurity/casual labour' received 20 entries under employment situation for Nitinagar, but only 10 in educational situation, yet in both categories it receives the highest value. The same procedure was employed for the medium and weakest significance of indicators. Three aspects characterise the analysis and interpretation:

1. Identification of the highest value within a risk sphere;
2. Interpretation within a risk sphere (vertical analysis);
3. Interpretation across risk spheres (horizontal analysis).

[79] It is important to point out that it is indicators and no 'correct' measurement. These matrices assist with the interpretation, but do not provide a full understanding. Hence the following analysis uses the matrices as a point of reference and complements the information with additional qualitative data from interviews and participatory workshops.

Matrix 6.1: Nitinagar and Meladinagar – Risk Spheres and Conditioning Indicators

Indicators conditioning Risk Spheres		Risk Spheres: Employment N	Employment M	Health N	Health M	Education N	Education M	Social situation N	Social situation M	Riots/violence/ crime N	Riots/violence/ crime M	Environment N	Environment M	Natural events N	Natural events M	TOTAL N	TOTAL M
1.	*Insecurity/ casual labour*	••• (20)	••• (20)	•• (10)	•• (9)	••• (10)	••• (8)	•• (11)	• (4)	••• (17)	••• (18)	• (1)	--	•• (13)	• (3)	82	62
2.	*Monsoon*	•• (7)	•• (11)	• (2)	• (2)	--	--	--	• (1)	--	--	• (2)	• (1)	•• (16)	•• (6)	27	21
3.	*Illness/disease*	• (2)	•• (6)	•• (10)	••• (12)	• (2)	• (1)	• (1)	• (1)	• (1)	• (1)	•• (12)	•• (10)	•• (8)	• (3)	36	34
4.	*Indebtedness*	•• (7)	• (1)	•• (9)	•• (8)	• (2)	• (2)	••• (15)	••• (13)	•• (8)	•• (5)	--	• (3)	• (3)	• (3)	44	35
5.	*Addiction*	• (3)	• (1)	• (1)		• (1)	--	--	• (1)	•• (6)	• (3)	--	• (3)	--	--	11	8
6.	*Food shortage*	•• (8)	•• (6)	• (5)	• (2)	--	--	• (1)	--	•• (5)	•• (5)	--	--	--	--	19	13
7.	*Anti-social activities*	--	• (4)	--	• (1)	--	--	--	--	• (1)	•• (15)	--	• (3)	--	--	1	23
8.	*Gender*	• (1)	• (2)	--	• (1)	• (1)	--	• (1)	•• (10)	• (1)	• (3)	• (3)	• (1)	--	--	7	17
9.	*Harassment*	•• (5)	• (2)	--	--	--	--	--		• (1)	• (2)	• (3)	• (1)	--	--	9	5
10.	*In-migration*	--	• (2)	--	--	--	--	--	--	--	--	--	--	--	--	--	2
11.	*Water crisis*	--	• (1)	--	--	--	--	--	--	--	--	--	--	--	--	--	1
12.	*Illiteracy*	--	• (1)	--	--	--	• (1)	--	--	--	--	--	--	--	--	--	2
13.	*Dirtiness*	--	--	•• (9)	--	--	--	--	--	--	--	•• (11)	•• (6)	• (2)	--	22	6
14.	*Infrastructure*	--	--	••• (11)	• (1)	--	--	--	--	--	--	••• (18)	•• (12)	• (4)	--	33	13
15.	*Children*	--	--	• (3)	• (2)	• (1)	--	--	• (2)	• (1)	• (4)	• (2)	--	--	--	7	8
16.	*Belief/faith*	--	--	• (4)	• (1)	--	--	•• (5)	• (2)	• (1)	--	• (1)	--	--	--	11	3
17.	*Education*	--	--	--	• (2)	--	--	--	--	--	--	--	--	--	• (3)	--	5
18.	*Social obligations*	--	--	--	--	--	• (1)	•• (8)	•• (6)	--	--	--	--	--	--	8	7
19.	*Marriage*	--	--	--	--	• (1)	--	•• (8)	•• (10)	• (1)	• (1)	--	--	--	--	10	11
20.	*Social Prestige*	--	--	--	--	• (1)	--	• (3)	• (2)	--	--	--	--	--	--	4	2
21.	*Relatives/ Family*	--	--	--	--	--	--	•• (6)	•• (11)	• (1)	• (1)	--	--	--	--	7	12
22.	*Air/noise pollution*	--	--	--	--	--	--	--	--	--	--	• (4)	••• (19)	--	--	4	19
23.	*Water-logging*	--	--	--	• (2)	--	--	--	--	--	--	• (1)	• (1)	••• (17)	•• (9)	18	12
24.	*Earthquake*	--	--	--	• (1)	--	--	--	--	--	--	--	--	• (5)	••• (18)	5	19
25.	*Cyclone*	--	--	--	--	--	--	--	--	--	--	--	--	•• (8)	• (3)	8	3
26.	*Accidents*	• (4)	• (3)	• (2)	•• (5)	• (5)	--	--	--	--	--	--	--	--	--	11	8
	TOTAL	**57**	**60**	**66**	**49**	**24**	**13**	**59**	**63**	**44**	**58**	**56**	**60**	**76**	**48**	**382**	**351**

Legend:

- ••• highest value within a category
- •• medium value within a category
- • weakest value within a category
- (7) frequency of references in interviews
- M Meladinagar
- N Nitinagar

6.2.1 Employment Situation: Casual Labour and High Job Insecurity

In both the slums insecurity and casual labour are the most prominent factors in this risk sphere. In Nitinagar the insecurity of jobs is significant in conditioning not only the employment risk sphere, but nearly all other risk spheres as well (see matrix 6.1). Businesses run by the vegetable vendors[84] and factory scrap collectors operate on an extremely low profit margin, which is further aggravated by a possible wastage of vegetables if not sold. A pivotal problem that remains for vegetable vendors is their inability to increase their business, because they do not have enough funds to buy in bulk. On the contrary, a serious difficulty for them is that they do not always have the financial resources to buy vegetables for sale. This instability of the business has repercussions on their living conditions: "We feel insecure about not having food, provisions and using adulterated goods." As a consequence of the irregular income, they cannot save money. Only on some occasions like *Divali* (October/November) the business goes well, which is sometimes the only opportunity to repay their debts. Other occupations such as scrap collection are partially affected by the economic recession faced by factories in Ahmedabad. The closure of factories left the collectors without income opportunities and it is frequently difficult to obtain the desired price. Following the market recession, factories produce less or even shut down, making less scrap available, and scrap collectors cannot purchase enough to survive on.

Insecurities for street vendors emerge also from the risk of being driven away from their work place. This kind of harassment is part of people's everyday working conditions. In one participatory session the residents wrote, "We are doing casual labour like vending of vegetables and fruits. Whenever we go for work we are

[84] The information on vegetable/fruit vending is derived from both male and female vendors who have provided very similar statements (see Appendix 5.1).

harassed by agents and local policemen. They would not give us permission to keep our cart in a certain place. If we wanted to do business at a certain place, we have to pay money (*hapta*) or some fruits or vegetables. After 12 noon we do not have permission to enter housing societies. Occasionally we are harassed by some 'bully guys' (small criminals, gangs)." So both vegetable vendors and jute collectors are forced to permanently roam around.[85]

While the job situation in Nitinagar is characterised by self-employment in the informal sector, many residents of Meladinagar experienced significant changes in being forced to move from permanent formal into casual informal employment; a trend congruent with the macro-developments in Ahmedabad's economy (see Chapter V). The residents of Meladinagar are engaged primarily in casual labour on construction sites, in textile mills or diamond factories. Many women, if not construction workers, are self-employed in home-based work such as stitching and producing tamarind sweets (*imli*) for local markets. According to the types of jobs, informality and casuality are the main risk conditions in this sphere. With prominence in the educational and riots/violence/crime risk sphere, 'insecurity/casual labour' is not as strongly relevant for the residents across all risk spheres when compared to Nitinagar (matrix 6.1).

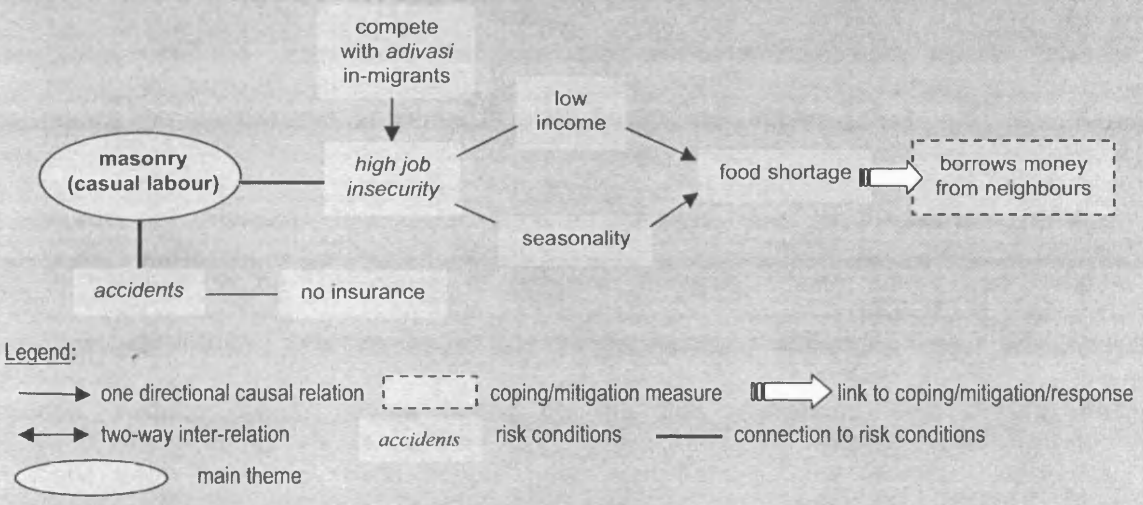
Over the last ten to fifteen years there has been an increasing pressure on the residents due to the large scale closure of textile mills, an influx of migrants into the city, and a changing working environment that was formerly comparatively secure. These changes are severely felt and recognised by this community. Earlier, the textile mills provided insurance, whereas nowadays people have lost this insurance by a reduced income, hence many feel they have only lost out in the past. They

[85] Besides a general antipathy against vendors and hawkers, harassment may among other things be connected to the identity of the *Vaghris* who are often viewed as offensive and dirty. Especially authorities like the police are likely to react harshly towards them (see Werth 1996: 77).

report that at that time one labourer could provide for ten persons, but after the closures of mills not even three members of a household are able to provide for ten people. According to them the labour rate is very low at Rs.40-50 per day. Today, many mills work at a reduced level and recruit people on a contractual basis only. In contrast, a mason may earn approximately Rs.80 per day at present.

All the statements illustrate these issues and suggest that the residents understand many of the processes that underlie their relatively recent situation and in their judgement have changed for the worse. They notice that the competition for jobs is becoming tougher, as one man argues: "Because of population growth we don't find jobs. Labourers come from another state and because of this our daily income decreases". Residents declared one reason why it is so difficult is that *Adivasis* come into the city, resulting in an oversupply at the *kadiya naku* (meeting point for

Box 6.1: Meladinagar Case Study - Insecurities for Casual Construction Workers



The interviewee came 18 years ago with the family to Meladinagar. They originate from Wadhwan in Surendranagar district in Saurashtra, where they still have a house. They also occupy a vacant plot there to build a house in the future. Their bonds with the native place are still strong, which is underlined by the fact that the entire family gets together there once in a year in October/November for *Divali*. In total the household comprises of seven members, three children, the wife of the informant, and his parents (they occupy two houses in Meladinagar). The informant is a mason on casual labour, his mother works in a nearby small-scale plastic recycling business, and his father is an ice cream vendor. He views his employment as risky because masonry work bears many dangers such as collapsing walls, which may lead to accidents. This is important because he does not have any insurance. In his opinion, due to urbanisation and especially after the riots tribals (*Adivasis*) migrated from Godhra region to Ahmedabad. They would also do construction work, yet their wages amount for Rs.40-50 per day, whereas he asks for at least Rs.80. This situation causes a lot of new competition, so that he would often not find a job. As one consequence of these conditions they face food shortage at times.

construction labourers). The particular situation of construction workers is exemplified on household level in box 6.1. Thus job insecurity is a daily experience that is even more aggravated by the seasonality of most jobs: "There is uncertainty of obtaining work for 20 days in a month. Four months of rainy season are very troublesome. So it becomes very hard to maintain five children", complains a woman.

6.2.2 Health Situation: Inadequate Public Services and Deterioration of Health Services

A strong set of issues perceived as being most important by the residents of Nitinagar can be identified in this risk sphere, namely 'infrastructure', 'dirtiness', 'job insecurity', 'illness/disease' and 'indebtedness' (see matrix 6.1). Particularly one feature, the lack of infrastructure, is connected to environmental conditions. The residents regard it as the most serious hazard which causes health risks. As a consequence, in the case of Nitinagar the environmental risk sphere clearly complements the perspective presented in the health risk sphere.

The dwellers of Nitinagar live in a dirty environment due to inadequate facilities, which is believed to be the cause of frequent diseases among adults and children equally. Malaria, fever, skin diseases and backbone pain were the most frequently mentioned. Asthma, which people blame on the dirty conditions, also occurs, and there have been cases in which people have died from asthma attacks. Additionally, in the opinion of many slum dwellers, childcare and the children's state of health are closely linked. A small income and lack of time make parents feel they cannot sufficiently take care of children. There are many children that fall ill and even die sometimes, especially on account of contaminated water. Children frequently become sick because of the lack of basic facilities and the problem of solid waste disposal.

They suffer from diarrhoea, as a resident maintains, "Children have diarrhoea from eating mud, because they do not know when they will next get food. We do not store grain but obtain it in small quantities."

One leader[86] argued that the residents generally have insufficient food resulting in malnutrition. He pointed out that many households would acquire food only irregularly, would purchase inferior quality vegetables and at the same time reduce their daily meals to one. People pointed out that "due to our small income we have to buy cheap grains and so we do not have adequate nutrition. For that reason we frequently develop malaria, typhoid and other diseases. We also obtain food from begging. We cook food once a day, and sometimes we eat stale food." Food shortage is explained for different reasons, of which job insecurity and a permanently insufficient income account for most.

In Meladinagar, people perceive a particularly strong link between their health status and their ability to work. This fact is revealed in both the employment and health risk spheres (matrix 6.1). For this reason there is no such set of multiple conditioning issues as identified in Nitinagar. In circumstances of casual labour, in which the contribution of every household member is essential, absence from the work place does not only include loss of money, but may even result in unemployment. According to the logic of the residents, sudden illness adds considerably to their employment insecurity, and vice versa that people suffering from illnesses find it difficult to get jobs. This is a type of vicious circle of risk, as one resident described it, "I have a small income which is the reason why I cannot afford a better treatment for sickness. This is also a cause why there may be more illness." Also, there are other reasons that impede, such as the accident prone construction work without any insurance coverage.

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[86] Community organisation and leadership is analysed in detail in the context of communication in Chapter 8.1.1.

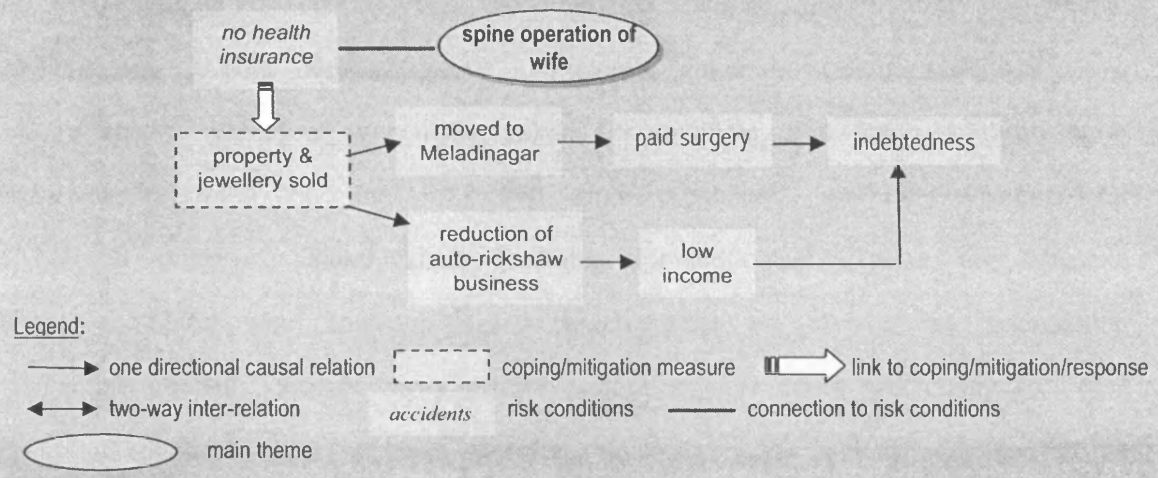
Women, in addition to working on construction sites usually bear the burden of running the household as well. Overwork or exploitation is another issue prevalent in such work environments: "We earn money but it is not enough, that's why we do hard work to get more money, and due to this reason we fall ill every now and then". These comments demonstrate a high feeling of insecurity due to the vulnerability to employment related health risks. It is a combination of insufficient insurance, unhealthy and/or dangerous work environments, and the pressure to earn more.

The strong link between illness and indebtedness in both slum settlements can be clearly inferred from the matrix. It signifies, together with the insecurity of employment, one of the central risk conditions in this sphere. Obviously the residents establish the link between an insufficient income, inadequate medical treatment, and higher frequency or more serious illness. Expenses for health often simply exceed a family's financial capacities. A woman in Meladinagar highlighted at times there would be not enough money for even such essential necessities as childbirth. The inability to afford sufficient treatment may turn simple illness into chronic ones, and can have fatal consequences for entire families due to the lack of insurance and financial security. One case was exceptional in this regard in Meladinagar. In this example illness became a 'life-changing' event for the household (see box 6.2).

Literally every household in Nitinagar is in debt due to the inevitable need for medical treatments. Residents consider budgeting a small income risky and they cannot afford adequate treatment. These conditions may have serious consequences even if the disease is not serious, "My wife caught cholera and died of it. I didn't acquire better treatment for my wife because my income is low." The vicious circle at work is well explained by this male resident, "There is recurring frequency of sickness. Minor illnesses do not affect us much, but when we catch serious

diseases we have to cease business, and at the same time we have to borrow money for medicine and household maintenance. This circling runs till the end of my life." Debt on account of medical treatment accumulates quickly in horrendous amounts for a household, if frequency and the number of household members are taken into account.

Box 6.2: Meladinagar Case Study - Illness as a 'life-changing event'



One Meladinagar resident, born in Ahmedabad, has two daughters (13, 20) and one son (10). His wife works as an *aaya* (child minder). He is a rickshaw-driver. He remembers, when his wife got sick she had lung and stomach problems, and he had to spend Rs.250,000 (approx. 5,000 Euros) for medical treatment in 1992. At that time he had two auto rickshaws and lived in a housing estate. The flat was his own property. Because of his wife's illness he had to sell everything and occupied the house in Meladinagar for a rent of Rs.500 monthly. During his wife's sickness he also sold out all her ornaments and jewellery. At that time nobody helped him, he managed everything on his own.

This case study is a typical example of the vulnerable conditions that may drive a household into poverty. The spine operation is a life changing event due to the absence of insurance. As is well known, health insurance is not a common practice in India, not even among the urban middle classes. Yet this is a reason why such families move into poverty very easily if a serious disease or illness occurs which requires expensive treatment and surgery. This family had their own house, he ran an autorickshaw business with two vehicles. It may be said that they belonged to the lower-middle strata of urban society with a secured livelihood before the incident which has dramatically changed their life ever since. The move to Meladinagar is not only a change in living conditions, but according to him he lost all his property because he could not borrow such an amount of money from anyone. The resulting indebtedness is a long-term consequence, and he thinks although his wife recovered, her illness is the main restriction for his present situation. The interviewee naturally responded, based on this experience, that illness is the major risk for him and his family.

6.2.3 Educational Situation: Job Insecurity and Awareness

Evidence of the matrix 6.1 suggests an overwhelming and singular relation between the insecurity of employment and the educational risk sphere. Job insecurity and indebtedness are related in various ways to each other in the context of education.

VI. Risk Scenarios in Two Slum Settlements

Unemployment is certainly one of the more serious impacts on the education of children, and under-/unemployed parents are aware that they are unable to provide schooling for their children.

While this is by and large true, at least in Nitinagar it appears to be only part of the reality. Much more obscure is the influence of social values and lack of time which also contribute to the difficulty to educate and bring up children adequately under circumstances of poverty but which is not directly visible from the matrix. There are only a few families which particularly value education, but they have trouble to secure education over many years. For example, one family sold an auto-rickshaw worth Rs.30,000 for Rs.25,000 and purchased an old rickshaw for Rs.10,000 in order to make funds available for education. These are sizeable sacrifices combined with financial losses which must be viewed as exceptional. Consequently, sending children to a private school is considered too costly for most residents of Nitinagar. Many families therefore do not provide school education at all believing schooling would be a waste of the time during which children can work and financially contribute to the household. On the other hand, parents argue that insufficient income is the main reason why they are forced to send children to public schools[87] rather than the preferred private ones.

Another pressing issue in Nitinagar is also upbringing and control of children by parents themselves. Many parents maintained they are unable to take care of their children during working hours because often both of them have to leave the slum. They worry particularly about the spot at the entrance of the slum that also serves as an exciting but perilous playground bearing a permanent risk of causing diseases (photo Chapter II). Currently many children play in such dirty places and parents do

[87] Still in a public school expenses for the uniform and books may amount to Rs.200 per child per month. This is a considerable amount compared to an average monthly income of some Rs.1,500 for an average household of six persons in the area.

not have time to control them due to their work. On account of such constraints risks may become lethal for children as an incident demonstrates in which a little girl died after she had fallen into one of the waste water pits. It seems though that most parents are aware of the hazardous environment and their limitations to control their offspring.

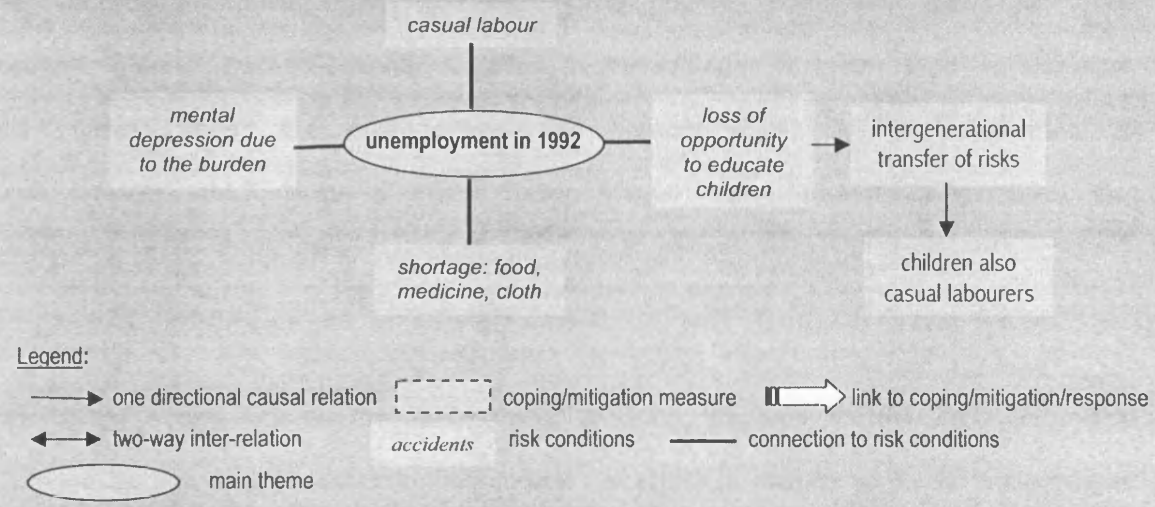
While studies in India have shown that education is widely perceived by members of socially disadvantaged groups as a promising means of upward mobility (Drezé and Sen 2002: 144), it seems the sense for education is relatively low among residents of Nitinagar when compared to Meladinagar. An attitude of there being no need to send children to school is prevalent adding to the overall lack of financial resources available or made available for educational purposes. Nitinagar displays a high degree of illiteracy. In this environment opinions prevail such as, "In my house nobody is literate, and I feel that education is risky for my children. I think if I forcibly send my children to school, they may become sick, because I do not send my children to school, it is no expenditure." This attitude appears to be a reason why 'indebtedness' is not significant in this risk sphere (see matrix 6.1). So, apart from lack of funds there is also an atmosphere among the community not to have children in school, they leave school at best after 7th grade. Adding to this, some residents even frankly admitted that education would be unpopular for practical reasons in the *Vaghri* community. For instance, evidently no young man would be married without having a job.

By contrast, in Meladinagar the attitude towards education differs considerably from Nitinagar. Although residents know that good education is no guarantee for regular employment, they conceive of it as an important prerequisite. Yet even though the general attitude towards education is very positive when compared to that of Nitinagar, unfortunately, experience tells the people that many are condemned to

long-time under-/unemployment even if they are better educated. This contributes to a great extent to the feeling of frustration about their future and the demand for aid from outside.

As a result, many people in this area perceive as a risk that their children will not receive a good education or no education at all. Box 6.3 presents such an instructive case. The figure illustrates the issues triggered by unemployment. As can be observed, the effects are all long-term, and may be seen as hazards that emerged as new risk conditions for the household. Indeed, they were perceived as grave by the respondent because they had an impact upon his children's education. This is a situation which may well be called 'intergenerational transfer of risks', i.e. risks that are at least partially inherited by the children. In Meladinagar, as opposed to Nitinagar, education is a dimension particularly viewed as a means generating

Box 6.3: Meladinagar Case Study - Employment and Education



The interviewee has three sons living in his household, who are 12, 14 and 16 years old. They have been residing in Meladinagar for the last 18 years. He expressed great sorrow about his unemployment ten years ago. He was a labourer in a coal factory then, but now gets only sometimes a casual job when he goes to the meeting place of construction labourers (*kadiya naku*). His wife is a mason, and his sons too are casual workers in factories and sometimes as masons, too. He maintained he would not have sufficient money for daily requirements like food, clothes and medicine. Above all he was very sad that on account of his unemployment he could not provide good education to his children. He asserted further he wanted to send them to school to enable them better job opportunities. But due to his unemployment they remain uneducated and find only casual jobs. In his opinion unemployment is a major risk. To him unemployment or no work means no money for daily needs. Because of the burden he feels mentally depressed.

opportunity and to escape menial jobs. This interviewee regrets that he could not confer such an opportunity to his children after he became unemployed.

Such a notion is due to the high value the residents ascribe to education in order to improve their children's future and job opportunities. This consciousness of good education can be traced to the relative wealth textile mill workers had enjoyed in the past. For this reason, vulnerability in this risk sphere is chiefly framed by employment insecurity. Even if they send their children to school, they have trouble to finance necessary stationary and books. Therefore many households respond to the situation by acquiring debt. Some still send their children to private schools knowingly without having the resources. This has partially to do with the standard people expect from schools. The residents set these standards comparatively high, even having in mind to send children to boarding schools.[88] But another reason for constrained financial resources, which is frequently mentioned, is expenditure for other necessary requirements (see box 6.3). My informants explained that this sort of chain reaction, because other expenses have priority, does not allow for good education. Clearly, the educational situation in Meladinagar is better than in Nitinagar. Many children attend the AMC school, but parents would like to send them to private schools which have a much better image. Many statements establish that education in AMC schools is not valued and usually regarded as useless.[89]

The reason why the educational situation is taken into consideration in the risk study is the strong link to the employment situation, as well as the recognition that knowledge is essential in an information age, a position mainly taken in Meladinagar. It is from this perspective that education of children and women enters the risk sphere, because illiteracy can pose a risk for women by inhibiting access to

[88] There are a few such cases where parents can afford to send their children to boarding schools.

[89] Teachers there would simply not teach. In municipal schools 50-60 pupils are in one class, and teachers are not able to handle that. Moreover, these schools cover only up to grade seven, afterwards there are only private schools left for continued education.

information, greater empowerment and independence, while for the young generation it generally means opportunities. However, education is costly in a country like India. In circumstances of insecure employment there is always the calculation of the trade-offs of costly private education versus a child's immediate economic contribution to the household since municipal schools are widely seen as ineffective. Even if children are sent to school, this is very often achieved by borrowing money.

6.2.4 Social Situation: Social Obligations and Social Security Networks

Data of the matrix indicate that 'indebtedness' assumes the highest value in this risk sphere. The risk conditions in this sphere centre on the issues of employment insecurity and cultural institutions like social obligations, prestige, marriage and gender. Moreover, in many respects people rely on their faith. Goddess worship takes on an important part in this risk sphere, since people consider the investment in offerings as a way of risk response to compensate for adverse effects, as well as a preventive measure to reduce risks. Consequently, indebtedness is a major result not only of people's low income and necessary expenses, but also to a great extent of their social and religious obligations. In fact so much so that it is found to be the major reason for indebtedness according to the matrix. While many interviewees have an ambiguous opinion about social obligations because they are expensive, they conceive this expenditure as an inevitable immediate connection to prestige and social status.

Many ceremonies like *Navratri* and marriages take place in the course of a year and people have to offer gifts or money to close relatives. Occasions like marriage or death mean that people have to invest money. This system of gifting is called *samajik vyavahar*, i.e. 'social intercourse', and then in a wider sense 'social custom'.

This latter expression reflects the obligation that is transmitted with this practice. The gift is then called with this term.

By virtue of their low incomes all interviewees in Nitinagar confirmed that they have to depend on borrowings to conduct social transactions. Religious and social occasions can be quite costly. For instance, that the religious festival *Mataji na Nived* may be expensive for the people is demonstrated in a case where a family sold assets such as land and other property in order to conduct the ceremony. Besides expenses for travel and the ceremony, people have to take time off their business in order to attend social occasions.

On the other hand, even if it is viewed as a burden, residents of Meladinagar also recognise that social obligations remain often the only source of social security. For instance, in one family the son-in-law was unemployed and his father-in-law felt he had the responsibility to support his daughter's children until he finds another job. Nevertheless, at times it is very difficult to maintain such obligations, even more so if the residents are migrants: "My father is sick", stated one man, "he lives in a village and we have to travel frequently to the village. I also spend money for my father's medicine. I lose my salary whenever I go to the village. Because of my reduced income I cannot spend more money for my own family." However, during my one-week-stay I found that within Meladinagar quite a few families have kinship relations through inter-marriage. Furthermore, some residents also have more or less close relatives who live near Meladinagar. Strikingly, these relatives were also more affluent, because they often enjoyed regular employment, an asset most residents of Meladinagar had lost. In times of crisis, among other means, suchlike connections provide a supportive network. However, the term social obligations illustrates that in many cases there are prescribed functions expected from relatives, which are hard to avoid.

VI. Risk Scenarios in Two Slum Settlements

Marriages as a major part of social obligations are strongly connected to indebtedness. This is inherent in the marriage regulations, no matter whether it is a system based on bride-wealth (as in Nitinagar) or dowry (as in Meladinagar). In the Indian context this is nothing new, but for the people it poses a high risk due to the insecure income situation. Literally every household in Nitinagar borrows money to arrange marriages. Indebtedness due to marriages and other social obligations often have long-term consequences for many years. They bind financial resources and assets which could otherwise be used to reduce other types of risk.[90] Besides financial risks, marriage carries other social issues. In Nitinagar for instance, social pressure occurs for girl child marriage. Girls are expected to be married in their teenage years, otherwise they become almost unmarriageable[91]. On the other side, young men are expected to have a job before getting married. As pointed out in the risk sphere education, this inhibits longer periods of school attendance, thus it may be one reason for a low literacy level among *Vaghris*.

The social institution of dowry (*dahej*), as it is practice in Meladinagar, can turn into a potential threat for the bride and her family. Women in Meladinagar confirmed that dowry is a critical issue, for it is compulsory. It causes stress for both hosts and guests of a wedding.[92] For guests because they are expected to visit relatives and

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[90] In this society the amount paid as bride-wealth (*kanyavikryia*) is about Rs.400-500. In cases of a love-marriage and the girl's family does not agree to it, the groom's family has to pay in the order of Rs.5,000. A girl's total marriage expenses nevertheless cost up to Rs.20,000-25,000, while a boy's marriage costs approximately Rs.25,000 to 30,000. Interest rates paid to moneylenders vary between 7-10% p.a.

[91] Marriageability connected to age is a general concern in Indian society. My personal experience in Meladinagar confirms this as well, where men who passed the age of 30 are called by a particular term. This comes close to stigmatisation. In short, an unmarried person is viewed by the society as a risk to married people since he/she does not have a permanent partner and thus may cause disruption to marriages.

[92] The people referred to dowry only to the gifts handed over between the bride's and the groom's family. But the bride's family's 'strategy' was, as people told me, to acquire all or part of the dowry through the gifts (financial and other material) presented by their kinfolk. In this way they asked for specific things from their relatives, hence the dowry became a socially much wider issue.

present them gifts, but simultaneously they feel it is difficult to attend marriages on borrowed money. For hosts because they have to take leave from work for social functions, and indebtedness is an inevitable concomitant of the joy of a wedding.[93] It also accumulates with other obligations. In some cases indebtedness is already so fierce that a wedding is almost impossible, as one woman pointed out: "Our two children have reached the age of getting married but due to poor financial condition we cannot marry them. We have lots of trouble to fulfil social obligations with relatives." I was told that if the demands by the groom's family are not sufficiently fulfilled it may happen that their in-laws threaten with divorce, or sometimes the daughters might even commit suicide.

Importantly, what comes to light in the above descriptions is a circle of obligations or gifts at work and that people depend on such normative customs. Everyone is in a position of giving and receiving, and both instances are mandatory according to prescribed norms. In the context of risk, these customs are certainly a financial burden for most households which may evolve as a threat to the bride, but simultaneously form the framework for social interaction which may as well provide potential security in times of need. As the fulfilment of social obligations is linked to the prestige of a family or an individual, the capacity to maintain social networks depends on it.

It appears that a family's and individual's personal honour is part of the overall condition of social and religious obligations. People know that they have to spend money when they visit their relatives and attend religious occasions. Otherwise, as pointed out by a woman from Nitinagar, "if we don't go to visit relatives and don't attend marriages and other occasions we lose respect in our society." Consequently,

[93] Marriage is the major cause for large scale indebtedness in Meladinagar. Amounts taken as loans range from Rs.20,000 to Rs.50,000, a considerable sum compared to an approximate average monthly income of Rs. 1,350 in this settlement.

frequently less attention is paid to business, since the notion prevails that, "to our community such obligations are more important than business." Clearly, the complexity of social obligations and socio-religious functions must be viewed as a part of people's risk rationality. Everyone is carefully observing each other, and those who do not comply by the rules take the risk of being excluded or denied support if the need arises. Particularly in this risk sphere the perception of reward/benefit and an adverse outcome is perceived ambivalently. While the family network is vital to support each other, the same network is equally viewed as a threat that constantly pushes a household into debt.

Compared to Nitinagar, reputation or social prestige was hardly mentioned in the interviews by the residents of Meladinagar. Yet it was brought up in another context. When we held the very first meeting with residents to introduce myself and my research, we had agreed to undertake an initial brainstorming with the residents. Women and men were requested to name one problem, threat, danger or similar that came to their mind. One of the elders mentioned that women would wear a veil, which would be an issue. I was astonished that this was emphasised so publicly. Later I witnessed women observing *laaj* (the covering of the face) as it is called in Gujarati, which still is a compulsory practice if they meet an elder male from their husband's family with whom they normally live. People asserted it is still a rigid practice in Saurashtra. The reality of this tradition came to the fore when we held the participatory workshop in a mixed group with both women and men (see Chapter IV).

I would not discuss this custom at such length if it did not carry a deeper meaning. As noted, on the surface it prescribes women to hide their face in certain social situations, and makes it sometimes particularly difficult for widows to interact with others for their minimum needs, hence putting serious limitations to their

activities such as the search for job opportunities. So this may trigger socially grounded risks to women who find themselves under constant pressure as these risks are produced by an oppressive and male dominated society. How this type of risk is socially and culturally manifested and constructed can be illustrated by the example of this custom.

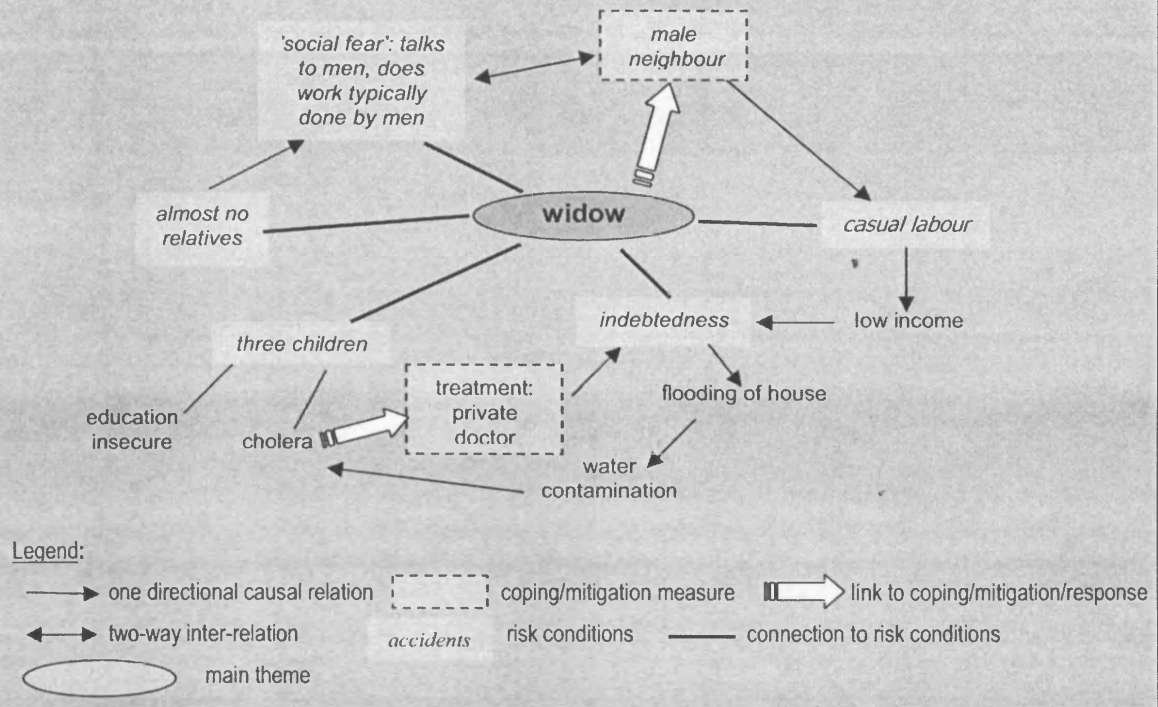
Significantly, in Gujarati *laaj* does not literally mean 'veil' or 'curtain', as for instance the existing words *purdah* or *burka* denote the seclusion of Muslim women. Typically enough, *laaj* means 'reputation' or 'credit'. Consequently in the first place the verb *laajvu* carries the connotation of 'being ashamed', that is to say, if the reputation is not maintained by the practice of veiling the face.[94] Presumably reputation is two-dimensional here. For once it refers directly to the woman who disturbs her personal reputation if not abiding by the norm. Yet she also affects the reputation of the entire family, in particular her husband's. As a result, social customs may contain a hazardous nature for women, if they prohibit them to exert certain types of action. Thus women are forced to find ways to circumvent them, but risk to be stigmatised or even outlawed by the community.

The case of a widow in Meladinagar exemplifies this potentially risky impact. Although there have been other widows, her situation was by far the worst, because she had no relatives in the area. Her case illustrates the 'risk battlefield', the interrelated conditions, within which she navigates (box 6.4) She can far less rely on social networks, as the social institutions are either eroded or mostly unavailable to a single woman. Since her family is fairly small, and does not have many resources, she has to depend on other people. This dependence puts her in a difficult position, since in doing so she is under pressure from neighbours for transgressing social boundaries that prescribe her role as a woman. Because her

[94] I have to thank especially my Gujarati teacher Prof Parmar for this insightful information.

defence mechanisms are further constraint by her weak asset base as compared to other households, her capacity for risk compensation is relatively low, whereas the degree of exposure to risks is considerably higher than for many other residents. Unless young widows have a strong backup from relatives and a secured job, their vulnerability is remarkably higher than the one of other households.

Box 6.4: Meladinagar Case Study – A widow's 'risk battlefield'

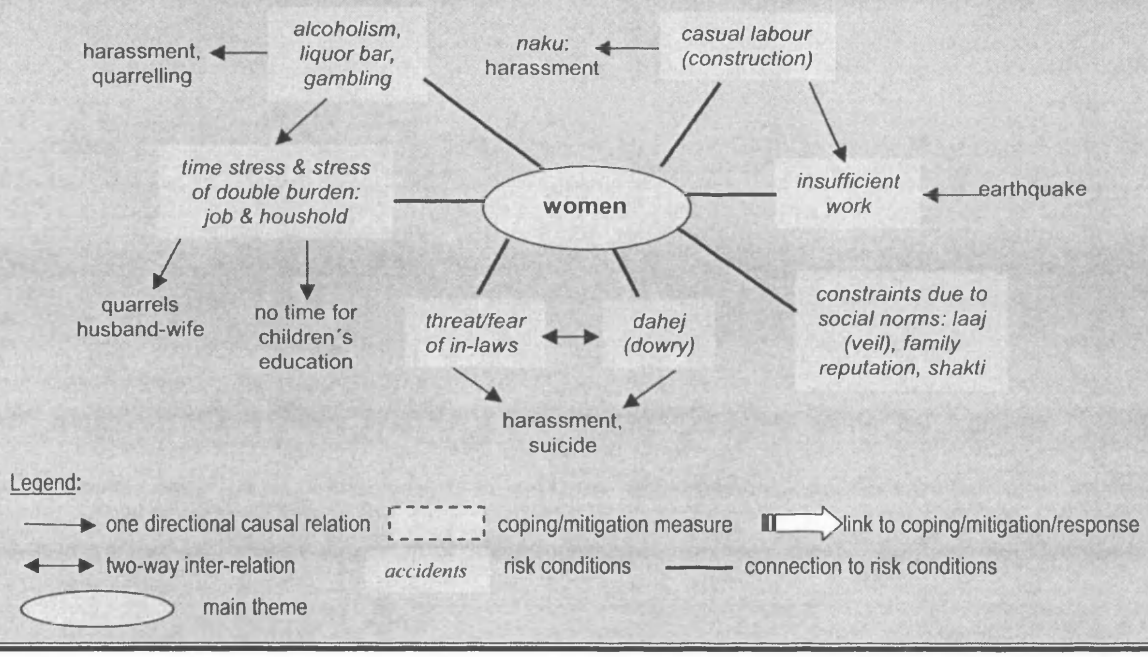


The widow is aged 35 years and Christian by religion. Her two sons are ten and twelve years, her daughter is eight years old. They are all going to school. With hardly six square metres her house seems to be one of the smallest in Meladinagar. The death of her husband in 2002 changed her entire life. This had serious immediate consequences, which are strongly linked to her social and economic environment. Her parents and brother, who live in a village outside Ahmedabad, supported her for several months after the death of her husband, but eventually she had to turn to casual labour. Yet in order to find employment she depends on the assistance from another Christian family, whose husband is helping her to find work on construction sites. The dependence on a male person who does not belong to her own family causes her difficulties. The resulting discrimination and harassment of being labelled not a 'good lady', i.e. not decent, makes her feel a sort of 'social fear', as she put it. Lack of money prevents her raising the level of her house, which is below road level ever since the upgrading took place. As a consequence, the flooding of her house results in the children catching cholera because drinking water mixes with drainage and waste water. Thus from her perspective primary risks relevant to her and her children are the employment insecurity, psychological stress, limited freedom to move (social constraints), and the education of her children.

While the above case illustrates the extreme situation of a widow, women of Meladinagar have identified a number of risk conditions, which show that they face pressures from various sides (box 6.5). These risks encompass harassment in the

work place (*naku*) and at home (alcoholism, quarrelling), or mental stress due to the double burden of managing job and household. The deterioration of the economic situation, which affected practically all households, shifted a lot more responsibility onto the women who are now trying to make up financial losses with additional casual or home-based work. At the same time many men are addicted to alcohol and do not work consistently or save money. The combination of risk conditions ultimately originates chiefly from the two spheres of employment and the social realm and in many circumstances an interrelation exists between them.

Box 6.5: Meladinagar – Women's Risk Conditions



6.2.5 Riots, Violence and Crime: Food Shortage, Financial Crisis and Illicit Liquor Business

This risk sphere is dominated in both the slum locations by two dimensions, the fear of riots and illegal activities connected to alcohol production and consumption. From this emerges job insecurity as the most significant factor in the context of the

riots together with food shortage and indebtedness, whereas addiction is primarily linked with illicit liquor trading and anti-social behaviour (matrix 6.1).

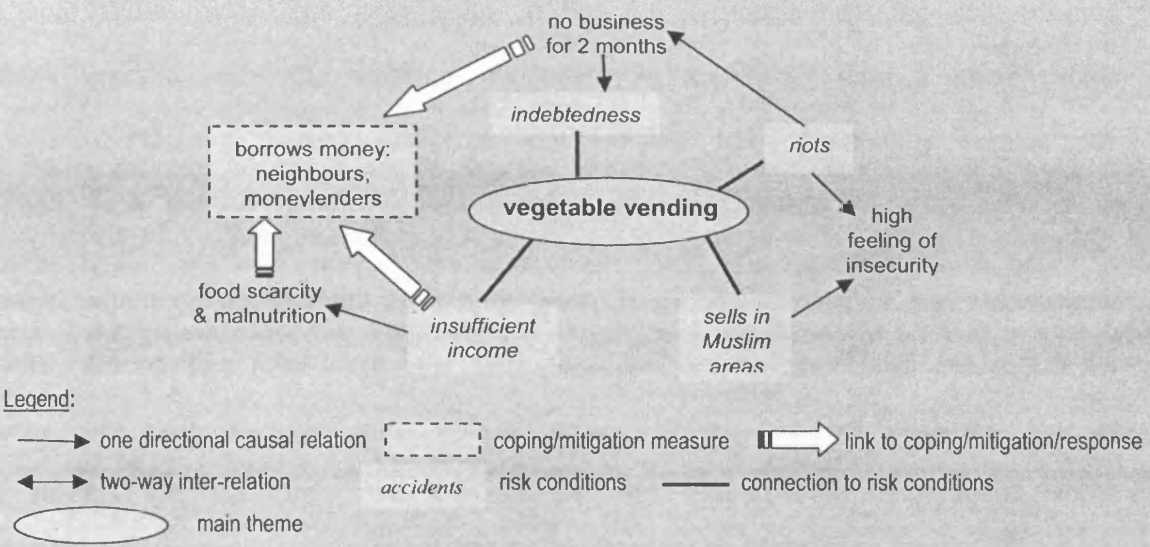
In both the slums residents were not immediately confronted with the occurring communal violence in the city in 2002, but felt very uncertain since they took place in the vicinity. Thus a constant fear of violence remained in the aftermath and mistrust was very prevalent.[95] Residents of Meladinagar did not want to have strangers in their neighbourhood after darkness. Although they usually feel that Meladinagar, as such, is not an insecure area. A reason for such suspicion, however, is the fact that Meladinagar is located in the heart of industrial estates with nearby Muslim dominated neighbourhoods, the *Vohra Roza* (an old Islamic religious complex) and Saraspur, where more police posts had been stationed due to many incidents.

A number of families in Nitinagar had earlier experience from other riot prone areas of the city. It was found that many households had moved from Gomtipur in east Ahmedabad. They had left that location due to recurring riots and because they were afraid of the Muslim majority there. These residents came to Nitinagar about 10-15 years ago, at a time when communal disturbances shattered the city in the mid-1980s and in 1991. Apparently riots occurred several times acutely in Gomtipur. One instance indicates that such risk related decisions may be also influenced by 'spiritual knowledge'. Faith in a deity is thus explicitly intermingled with the realities of daily life underlying that the rationality may be grounded in relation to a goddess. In this case one family, residing now in Nitinagar, did not entirely leave Gomtipur due to their *kuldevi* even though they feared a threat during recurring riots. My diary reads:

[95] I conducted my fieldwork in this atmosphere a few months after the riots had ceased in mid 2002.

"She told us, in Gomtipur is a temple of the goddess *Durga*. Her in-laws do not want to leave the area because they believe that they must pray daily to her, otherwise there may occur problems. *Durgamataji* is their *'kuldevi'*. In fact it is believed *Durga* can affect all spheres of life, she is able to cause accidents, children can fall ill, they won't be able to get food, and loss of employment is possible too. For this reason, she insisted, *Durga* will not permit her in-laws to move to Nitinagar. She said, at least one member of their family must stay back. I asked how they communicate with *Durga*. She replied, it is *'bhuva'* who communicates with her. *'Bhuva'* will tell them whether to leave Gomtipur or not. *'Bhuva'* is a person who is able to communicate with a god, a goddess or a *'bhoot'* (a ghost). As such he is a kind of medium. She still goes to Gomtipur on special occasions like *Diwali* and *Navratri*."

Box 6.6: Nitinagar Case Study - Riots and Accumulated Risks



Gitaben has a household of seven, three sons (4,5,6 years) and two daughters (5 months, 5 years). One son goes to the public school, and the elder daughter stays at home to look after the little ones. She told us that all the other children will go to school but the eldest daughter. They have been for 10-12 years in Nitinagar. Earlier they lived in another area in Amraiwadi from which the landlord had evicted them. They are vegetable vendors. She helps her husband for 1-2 months during peak season in winter and sometimes for one month in summer. Flooding also occurs in monsoon, though not regularly. This year (2002) it did not happen, but when it occurs, the water comes in many houses and stands about 1-2 feet high, outside even higher. She explained, their business is not sufficient, hence they always have to borrow money. To resolve this situation, they first turn to people within the area, for the moneylender is also not willing at times. They always have to manage to get money from somewhere. During the riots they stayed for 1-2 months at home and had to borrow money to survive. They must pay back Rs. 2,000 now. During this time the feeling of insecurity was very high, and they still have such fear when they sell their vegetables in Muslim areas. Periods of scarcity occur always out of a sudden, then they have to organise at least some *chapatis* (Indian bread) two times a day.

VI. Risk Scenarios in Two Slum Settlements

As for many inhabitants of Ahmedabad, riots pose a major disruption of life in Nitinagar with disastrous consequences for income activities. For up to four months following the 2002 riots many businesses could not be pursued regularly due to the insecure situation in the city. Even though Nitinagar residents were not directly involved in the riots, slum dwellers were among the most vulnerable because of their low asset base. All families invariably faced financial shortage and were unable to maintain the household. Hence all households had to seek financial aid. One woman reported: "We had no work during these riots, and other people provided us with food. Near Nitinagar live some Brahmins and Patels who supplied us with food for 10-15 days a month. For the rest of the time we went to a relative's house in Ahmedabad". Food shortage, already a permanent threat in normal times, became an even more acute reality. The case study in box 6.6 illustrates how the riots affected vegetable vendors while the violence happened. At the same time it demonstrates how it connects and thereby reinforces low intensity but permanently existing risk conditions, such as the insufficiency of incomes and food shortage.

Concerns regarding employment insecurity were frequently expressed by Meladinagar residents: "During the riots work was very insecure. Maybe we could get a job for one day and next day we were without again." There was not only the fear of being attacked on the roads, but also at the work place itself. As a result, some factories simply remained closed due to incidents of communal unrest among the workers. While many people did or could not work out of fear or due to closed factories, other households maintained they had no choice but to work in order to avoid starvation and financial disaster: "During the riots we did not have any choice to find another business. So we had to work at the risk of our life." For them, either way was a question of survival. In a few cases of self-employed labour residents reported that their business was largely destroyed or they had to accept high losses. Often it takes several months to get the business back to normal

conditions. There have been more long-term effects on people's life, such as the repayment of loans which were taken up to survive the period with less income. Besides, as remarked earlier, since education is valued as more important in Meladinagar than Nitinagar, some people maintained that they were even more unable after the riots to bear the expenses for educating their children.

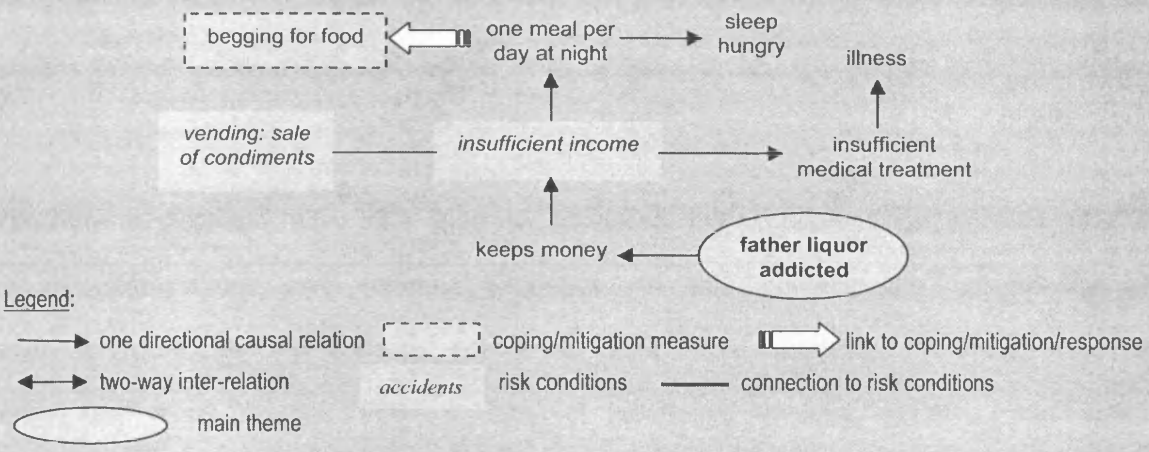
Besides the riots, illicit and so called anti-social elements also contribute to people's daily risks. Anti-social activities and liquor addiction is the second major complex within this risk sphere (matrix 6.1). Slums in particular are viewed as breeding grounds for bootlegging. Such activities are fostered by a liquor bar situated at the entrance of Meladinagar, were alcohol is illegally distilled (see map 6.2). This place naturally attracts people from outside who come to buy liquor and gamble with residents, or just hang out there. Added to this is the fact that behind Meladinagar is a *smashaan*, a crematorium, from where funeral guests come after the ceremony to the area for the 'funeral feast', i.e. to buy liquor. The bar occupies an excellent location for this purpose. I myself noticed the impact of this place, for whenever I entered the area I had to pass some drunkards.

The residents also perceived this spot as a main source of nuisance in the area. Harassment and the impact of the liquor bar on women and children was a regular topic in our conversations. The people were mainly concerned about the women and children who have no choice but to pass this bottleneck, referred to as Meladinagar *nakar* (entrance). Residents pointed out that there may be different kinds of addiction risks to the children such as *gutka* (chewing tobacco), smoking, alcohol, and gambling. One resident maintained that the existence of the bar has also consequences for their reputation. It might be an obstacle in the context of marriages, for if a prospective bride's or bridegroom's family visits the area and notices the illegal bar, they might not want to marry their children to someone here.

Other residents too feared violence and crime in connection with the sale of liquor in the area. One argued that their relatives cannot come for visits in the evening. A year ago something had happened to a neighbour's daughter. She was passing through the alley and there were some strange guys who called her names and harassed her. There was consensus about the fact that whenever there is some quarrelling police also cannot help them. The liquor bar is viewed as the root of such quarrelling.

The conditions in Nitinagar are not entirely different. Many people are addicted to alcohol, which in turn attracts bootleggers who have taken advantage by selling liquor. In the participatory workshop, people pointed out that due to these addicted persons there is quarrelling at home and among the residents. However, as one woman told me, "It is the women who suffer from this". The impact is multi-facetted and relates to the employment and health risk situation. One woman of Meladinagar

Box 6.7: Nitinagar Case Study - Impact of Alcoholism on Women in a Household



In this household that comprises six members, the widowed father -whose wife had died of cholera earlier- retains his money of Rs.50/day from stitching jute for his addiction. Therefore the burden to provide for the 10 and 12 year old boys and the 15 year old daughter remains with the two eldest daughters, aged 18 and 20 years old. As explained by the eldest daughter, this has serious implications for their daily life, especially because the sisters together can earn only about Rs. 50/day: "Besides me only my sister goes to sell condiments, and it is very difficult to provide for the family. My father is liquor addicted and never gives money to maintain the family needs. Therefore my one sister also goes for work. We also have to go begging for food at night. Often we get only one meal in the night, and if we don't get any food we even have to sleep hungry. Because the food is insufficient we fall ill frequently. In this situation one of my sisters became sick, she got hysteria. Due to our insufficient income, we cannot afford adequate treatment. The education of my other brother and sister depends on me and my sister's income. It is like a risk because basically only my sister earns all the money."

described her situation: "My husband works in a mill, but he is not given sufficient money. He drank liquor from early in his life. Therefore I have to do any kind of work." As a result of these circumstances, self-employed home-based work is pursued by women and girls to cover up such financial losses. The impact alcohol addiction may have especially on women's living conditions, is depicted in box 6.7. The case demonstrates how alcohol addiction radiates into other living conditions such as work, illness and the dependency of women on a male household head. Alcohol addiction is therefore a potential risk for many households.

6.2.6 Environmental Situation: Gender Dimensions, Lack of Public Facilities and Water Contamination

This risk sphere highlights stark contrasts between the two slum settlements on account of their significantly different standards of public service provision. Obviously, in Nitinagar the residents are mostly struggling with the lack of many services and risks resulting from this condition, whereas in Meladinagar it is more inadequacy of provided services and additional health risks posed by air and noise pollution (matrix 6.1).

Particularly in Nitinagar the data indicate gendered risk conditions on account of the lack of infrastructure and sanitary amenities. In this context, the vulnerability of women in such an environment comes to light more explicitly. In many regards women are more at risk from a lack of adequate sanitary systems and water supply than men. The insight that the health risk sphere is strongly connected to the conditions of the environmental circumstances is corroborated by the data revealed in this risk sphere (see matrix 6.1). Reference to 'infrastructure' is found to be the highest value in this category, which relates to 'illness/disease' and 'dirtiness'. A woman resident summarises people's concerns such: "There is a lot of dirtiness

in our area. In the absence of proper roads we cannot walk easily. During the monsoon our area and house are also flooded by rain water, and this type of filth remains throughout the year. We become troubled in the absence of basic facilities. Bad smells develop because we do not have our own toilet, so we have to go in the open spaces, which are located near our area. We cannot use public toilets, because they are far from our house. For this reason our area became very dirty, and we are affected by diseases like cholera."

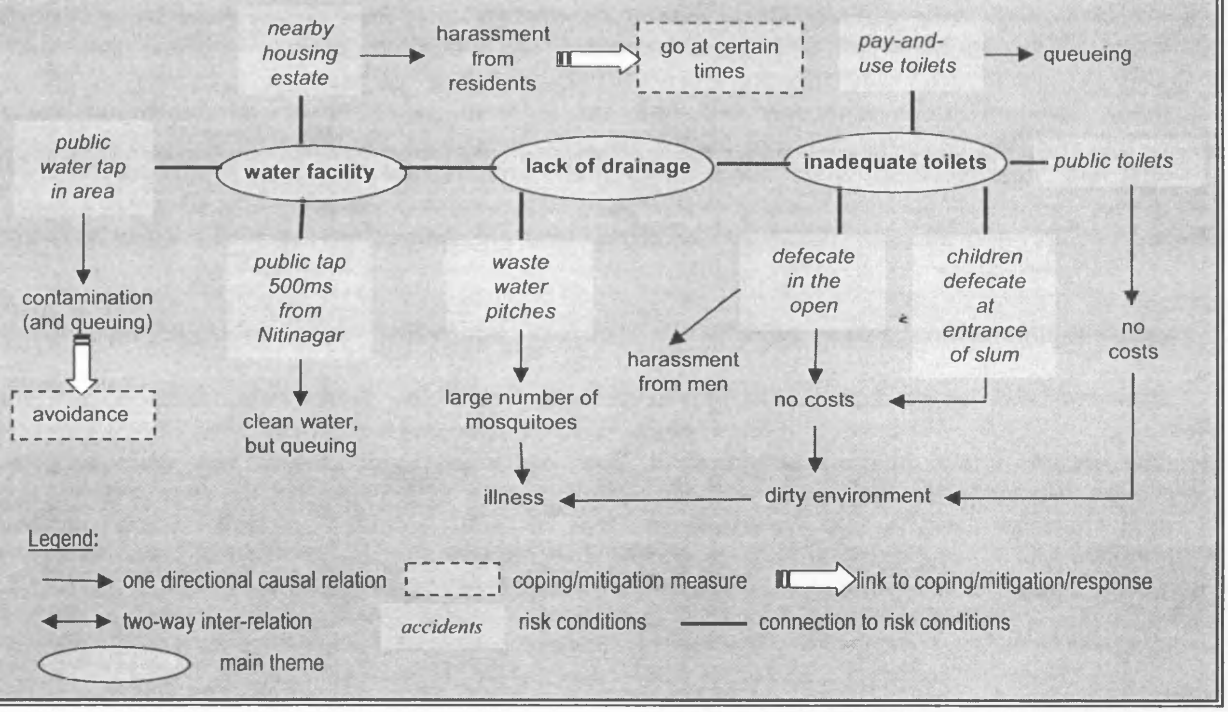
Due to the lack of a sewerage system all households have a pit in front of their house to collect waste water, which is emptied 4-5 times a day and thrown into the open space at the entrance of the slum. Garbage and waste water collects especially at this spot near the entrance. People complained that because of the lack of a drain they could not build their own toilets even if they wanted to. They reported that it is tiring to dispose of waste water in distant places. Consequently many people also dump waste close to their houses. This disposal within the area results in disputes between residents because some feel affected by such behaviour and are aware of the risk of spreading diseases.

Water supply too is poor both in terms of quantity and quality. There is a public water tap facility at the entrance to the slum (see map 6.1) and another one near the main crossroads, but too many people are queuing there every morning. People commented, "There is no source of water, and if we want to get water in the early morning we have to walk about 500 metres [to the crossroads]. If we go to fetch water from another area [a nearby housing estate], the people there would tell us, 'first do some work for us, then you can take some water'. If the women go to the other area to get water they also face harassment (*chedti*) from men and boys. Besides, men also have to go to get water on the bycycle and therefore cannot attend to their jobs at the right time. It causes husband and wife to quarrel

over this whole water issue". In order to avoid queuing and quarrelling at the public taps, many women try to obtain water from a nearby housing estate, but they face several problems there as well. Residents of the housing estate often do not allow Nitinagar residents to fetch water, so that these women are forced to eventually 'steal' it, taking the risk of being beaten up.

Box 6.8 shows how residents of Nitinagar attempt to reduce the impact of insufficient water supply, toilet facilities and the lack of a drainage system, and what types of risk they encounter. As residents put it during the participatory workshop, "We have four public toilets in the area, but most of the time we have to go in the open space, which is a walk of 15 minutes. This causes insecurity particularly for us women. Our husbands say that other people will harass us. So we usually go early in the morning at around 6am. Women also feel ashamed to go outside to the toilet. Whenever we go to the open ground persons of adjacent areas throw stones at us. Hence sometimes we go to pay-and-use toilets, but we suffer there

Box 6.8: Nitinagar - Risks and Response related to Environmental Conditions



as well wasting our time because of long queues. This affects our time spend to earn money. Therefore at times we do not go to the toilet at all and then suffer from stomach ache." Apparently quantity as well as quality of public toilets is insufficient in this slum location. The residents, in particular women and girls who are chiefly affected by these adverse conditions, have to find strategies to surmount these issues.

The nature of water-related risks in Meladinagar is somewhat different from Nitinagar. A major issue for certain residents in the area is the water supply and a fear of drinking water contamination. People highlighted in the group sessions, "There is not enough water pressure. Initially we had tap water in the toilets or bathroom, but right now many households do not have this facility any more. Instead we made pools to increase the pressure, yet still do not have sufficient water." This situation is due to different reasons, among others the landscape, which is characterised by an inclination from south to north. It appears roughly one third of the households are affected (see details in Appendix 5.4, table 5.2), a relatively high ratio for a slum area with upgraded infrastructure facilities. However, in many other SNP-areas there are similarly severe problems. In Hanumannagar I-II, for instance, there is at times no water for some three months, so that the residents there installed water pumps rendering the new water taps redundant. This case demonstrates that the drinking water issue is not merely a local problem.

In addition, residents also expressed the risk of drinking water contamination. They emphasised the pipes were laid too close to each other, sometimes the sewerage even crosses the water supply line so that if it breaks, waste water mixes with potable water. People asserted this is not a phantom fear. They reported from

incidents regarding the damage of drainage and water pipelines and resulting illness.[96]

Although health issues related to conditions of air and noise pollution were mentioned infrequently in the health risk sphere, it is here that the residents lay bare another link between their environment and health. This is, as a result, well visible from the matrix, which clearly establishes the connection between air/noise pollution as the highest value and illness. Since the area is surrounded by a number of obnoxious small-scale factories and industries, these are identified as the main culprits. These conditions have consequences ranging from illness to indebtedness. The nearby textile mill and the cotton waste warehouse are undoubtedly perceived as the major sources of air and noise pollution. The warehouse was widely made responsible for cotton particles that fly in the air causing respiratory problems, particularly asthma, throat infections and coughs. Moreover, a few informants were aware of the charcoal stoves, which are still used in the area: "In our area people fire up coal-stoves. Due to its smoke, we have difficulty with respiration." Frequently clouds of smoke hang over some lanes where people produce charcoal. Air pollution is conceived as a main and dangerous issue in this risk sphere.

It seems this risk sphere in particular underscores the spatial distribution of risks. The separation of uses into zones, generally hardly practised in Indian cities, has not materialised in these old industrial areas. It is these industries that create the most hazardous impacts on their surroundings, much to the contrast of the 'clean' industries on the western fringe of the city. With the closure of many textile mills,

[96] Tripathi and Jumani (2001: 51) document that after the pilot project in Sanjaynagar, inferior material was used by the AMC for infrastructure facilities in all other slum areas.

however, it remains open as to how industrial waste land is converted into less hazardous use.[97]

6.2.7 'Natural' Events: Earthquake, Monsoon and Seasonality

On the surface, findings in this risk sphere indicate a discrepancy between Nitinagar and Meladinagar in the significance of conditioning indicators. In direct comparison of the two slums, it seems the physical upgrading of Meladinagar reduced many risks related to monsoon and water-logging, the major issues in Nitinagar (matrix 6.1). However, while for Meladinagar the earthquake assumes prominence in this risk sphere, the impact is confined to minor damages on buildings. It is more the recent history of this event that seems to be dominant in people's memory, and certainly left a fear in them. In relative terms, however, Meladinagar residents still identify the monsoon and water-logging as major issues in this risk sphere (matrix 6.1). This aspect illustrates clearly the relativity of risk perception, which depends on the point of reference. Thus from an outsider's viewpoint, the conditions of physical infrastructure in Meladinagar have improved as compared to other slums, which is appreciated by the residents as well. But in relative terms it is still a significant factor within the risk sphere and recognised as such by the residents.

In contrast to Meladinagar, the interdependencies of monsoon and water-logging, job insecurity (in terms of seasonality) and illness are more clearly established in Nitinagar (matrix 6.1). Cyclones and the earthquake seem to play a lesser role in the perception of risk. Cyclones are a threat in areas such as Nitinagar where many huts exist. They usually damage the roofs first since many are made from

[97] This is a topic of the new development plan for the city. When compared to Mumbai, where the conversion of the old textile mills has taken place on a larger scale, the immense potential could not be used till date in Ahmedabad. The total land area occupied by the closed mills is 3.34 sq.kms. Due to complex use change procedures and because of claims of banks and workers the land is lying vacant since 1985/86 (AMC 2003: 22- 23).

iron sheets. Some households in Nitinagar are especially vulnerable because they make their houses from jute sacks, which are easily blown away (see photo Chapter III). While cyclones are viewed as a frequently occurring risk, the earthquake does not seriously affect people's perception.

Another dimension in Meladinagar is that, similar to the water supply, not all households are equally affected by water-logging. In this case households which are located at the low-lying southern end of the area and those which cannot afford to bring their building to the same level of the road suffer more.[98] Further, insecurity of employment, which is linked to the monsoon season, is more pronounced in the risk sphere employment situation (see indicator 'monsoon'). Seasonality runs continuously through the accounts given by the residents. The monsoon is naturally the most frequent reason for interruption of employment and therefore perceived as a risky and difficult time, because people have to rely on the other seasons. A woman told me, "The house is filled with water during the monsoon. We get only ten days of work in a month. There is so much risk in the rainy season and no work." The damage in these circumstances is the same as in Nitinagar, just on a smaller scale. Even the upgrading can not prevent flooding of houses in a heavy monsoon. In 2000, the same year upgrading was completed the rain was so heavy that people still remembered it as a flood: "Due to heavy rain the other house got flooded and our grains decayed, epidemics spread and the hospitals were overcrowded with patients."

Obviously, so called 'natural' events such as flooding due to heavy monsoon rains are in fact to some extent contingent on human activities. Since Nitinagar is a low lying area, water entering the houses could be largely kept away if a drainage system was in place. The sorry state of public services results in further hazards

[98] The road level is higher now than before the upgrading, which requires elevation of houses. Yet investment in the building is not part of the SNP package.

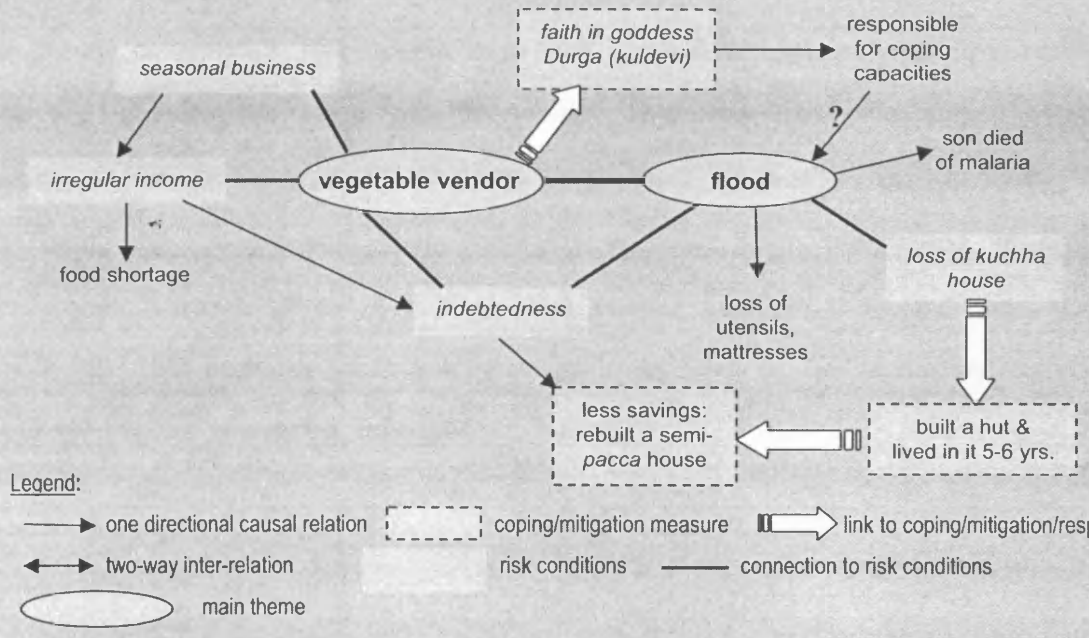
creating health risks. Since public toilets overflow in monsoon due to rain water, they are frequently unusable. Public toilets thereby become centres of potential epidemics. These relations are clearly perceived by the residents. Here the conditions are directly connected to the environmental situation, particularly 'dirtiness' and 'infrastructure', which in turn connects to the health state. These two indicators, 'ill health' and 'insecurity' in business are seen as the principle risks during the monsoon season.

According to information given by residents, monsoon floods occurred most seriously in the recent past in 1997, 2000 and 2003. The water stood about five feet high, collecting mainly at the entrance of the slum and on the main interior road. Nevertheless, what they call 'normal floods', i.e. water logging, has occurred about eight to ten times in recent years. As nearly nobody can work and due to the lack of assets many residents depend on begging or on food rations in these circumstances. Similarly, as during the riots, individuals help them out with food in such situations. One woman resident emphasised, "We could not even cook during monsoon because our house was also flooded by rain water that comes through the perforated roof. So we make the children sleep under the bed." During flooding there is no space to secure household belongings, hence most households are at risk of losing their belongings such as clothes, beds and other household utensils, while at the same time having to bear a loss in their business.

One woman resident narrated a detailed account of the repercussions of water logging. Her case illustrates in some detail the context of her living conditions and how the flooding of her house affected her family. It highlights the link between available and lacking resources with respect to the degree of vulnerability, which is graphically explored in box 6.9. Central to the diagram are the two elements 'vegetable vendor' and the 'flood', from which other situations evolve. This case

illustrates the deep impact a disastrous event like the flooding of the house may have on a household in Nitinagar. The consequences are far reaching and dramatic, long-term and result in a long period of slow recovery over many years. Hence, vulnerability to such an event is very high and additionally increases the degree of vulnerability. This period of recovery is further prolonged since small-scale risks like the seasonality of business, health treatments, and indebtedness due to socio-religious obligations accumulate throughout the year(s) leaving their traces and depleting the few resources available. Within this environment the goddess *Durga* assumes great importance in the life of this woman. In fact her rationality hinges to a large part on the faith in her *kuldevi*. Therefore she feels protected and guided by her, and the goddess offers ways of relief and coping with risk situations.

Box 6.9: Nitinagar Case Study – Flooding as a 'life-changing event'



The woman has four daughters (two married) and three sons of whom one had already died. At present six persons live in the household. While her husband is a drum player, she is a vegetable vendor with a very irregular income of Rs.600-700 per month. Due to the monsoon she has to borrow money, and lately her family had to arrange her son's wedding. This occasion and the insecure business are one of the reasons why she is indebted. She is so poor that at times she suffers from food shortage in her household. In 1994 flooding of the slum changed the life of her family. The water came through the roof in their house and they were not able to leave it in time because the water was also three to four feet high in front of it. They not only lost utensils and mattresses, but also the kuchha house. Yet above all she lost her youngest son who was not even three years old then, because after a few days in the flooded house he got malaria and passed away. After the flood, they had no savings due to their debts and could not afford to rebuild the house. Instead they had to live in a simple hut for the following five or six years, and over the years were able to slowly rebuild a semi-*pacca* house.

6.3 Risk Response: Adaptation and Mitigation

Examining risk response assists in understanding people's notion of risks, for it reflects on the reasoning underlying risk perceptions and also reveals resources linked to risk coping strategies. Residents of both the studied localities deploy a variety of strategies in risk response. In Nitinagar, strategies related to tackle financial crisis are most prevalent. The sheer number of available options highlights the significance of this way to deal with risk situations (table 6.3). This is not surprising, since we know from the risk analysis above that, first, employment is severely insecure, and secondly, indebtedness is linked to nearly all risk spheres. However, risk response is marked by a diversity of strategies that stretch over various risk spheres.

Similar to Nitinagar, mitigation of financial crisis and employment insecurity are at the centre of people's risk coping measures in Meladinagar as well. As results in table 6.2 demonstrate, these two interrelated dimensions take the largest chunk of endeavours in risk coping. Although employment insecurity is conceived most significantly by the residents, their strategies to tackle them are limited. In order to avoid unemployment, many see only one option, i.e. trying to get any kind of casual job. Yet such 'diversification' has its limits due to an increasing competition between different groups of labourers.

Table 6.2: - Risk Coping in Nitinagar and Meladinagar

MELADINAGAR		NITINAGAR	
Coping Areas	**Response**	**Coping Areas**	**Response**
job insecurity	▪ do all sorts of casual labour ▪ overworking ▪ women enter workforce: self-employment/casual labour	***job insecurity***	▪ various businesses to mitigate impact of seasonality ▪ rely on good business in winter to make up loss in monsoon ▪ work temporarily as agricultural labourers in native village
financial resources	▪ relatives ▪ neighbours ▪ employers ▪ moneylenders ▪ sale of jewellery ▪ overworking ▪ insurance	***financial resources***	▪ relatives ▪ neighbours ▪ moneylenders ▪ sale of ornaments ▪ sale of household utensils ▪ sale of goats ▪ sale of/mortgage on house ▪ begging
riots	▪ security guards at area entrance ▪ relatives/neighbours: give food ▪ borrow money ▪ move to native village ▪ close the *otlo* (verandah)	***riots***	▪ move to native village ▪ begging for food ▪ borrow money ▪ sale of jewellery and vessels
illness	▪ insurance ▪ private doctors ▪ public hospital ▪ goddesses	***illness***	▪ private hospital ▪ insurance ▪ worship of goddesses
monsoon/floods	▪ raise level of house	***cyclone, monsoon***	▪ shelter in nearby AMC school
earthquake	▪ financial aid from government	***food shortage***	▪ begging at neighbouring housing societies
water issue	▪ complain at AMC Zonal Office ▪ lowering of taps	***drinking water***	▪ get water from outside the area
marriage	▪ funds from government scheme	***any emergency situation***	▪ neighbours ▪ network of relatives in and outside of Ahmedabad ▪ protection by goddesses ("everything is in hands of the gods")

Income insecurity naturally conditions financial shortage. Consequently, indebtedness is identified as one of the major cross-cutting factors in almost all risk spheres (see matrix 6.1). The connection between indebtedness and social obligations is particularly strong. Apparently each household deals with it according to the resources available, but the most prominent way to cover financial shortage is to borrow money from moneylenders, relatives or neighbours. A typical preference for one of these groups

to borrow from could not be identified though. Rather, it depends on the reason why money is borrowed and who is lending. For instance, some families do not want to borrow money from relatives when they have to organise a wedding, because social obligations are involved that have to be observed. Yet in other instances people would ask for financial aid from relatives. The ambivalence of this aspect of risk, social obligations and religious practices as a resource to cope with risk situations, as well as being perceived as risky to create indebtedness, was pointed out earlier. How this aspect of benefit and adverse consequences is valued depends on each person's actual situation. It is especially in this instance that the multi-facetted dimension of risk comes to the fore, highlighting that the perception of risk may change according to the actual situation and context.

Table 6.3: Assets in Nitinagar and Meladinagar

Resource level	Resource base	
	Meladinagar	**Nitinagar**
individual/household	➲ house and land	➲ land and other property
	➲ relatives/property in native village	➲ native village
	➲ give jewellery or some other things on lease	➲ jewellery, ornaments
	➲ fan, gas stove, wardrobe, vessel stand	➲ household utensils (e.g. brass vessels), wardrobe
	➲ vehicle, cycle	➲ vehicles: cycle, autorickshaw
		➲ 'lari' (handcart) used for vegetable vending
	➲ radio, TV, music system	➲ TV, radio
	➲ stitching skills & sewing machine ➲ handcraft and other skills	➲ goats, pigeons
	➲ electricity and individual water supply	➲ electricity on rent (very few households)
	➲ (SEWA) bank account, life insurance	
community	➲ cooperation with each other	➲ cooperation between each other
	➲ telephone (one in area)	➲ good relationship between residents
	➲ community leaders	➲ community leaders
	➲ CBO	➲ area temple
	➲ share certificates	➲ *Svadhyaya* movement
	➲ relationship with NGOs	
	➲ TV	

It appears that a number of households in Meladinagar also have some type of insurance (life, health, savings). Although there is a higher rate of participation in such schemes than in Nitinagar, the reliability on insurance organisations still seems to be low (table 6.3). Some households were also able to successfully utilise government schemes. Such in the case of earthquake reconstruction and with a scheme called *Kunvaru nu mameru* that supports families financially in the marriage of the eldest daughter. The utilisation of such schemes indicates that the residents have some access to formally provided resources of this kind. In contrast, in Nitinagar evidence of the use of such formal remedies is negligible.

Consequently, a difference in the quality of available resources between Meladinagar and Nitinagar is evident. Nitinagar participants of the participatory workshop identified as community resources good relationships and co-operation between each other, arguing if there was any kind of co-operation, problems could be solved easier. Further assets are the temple at the entrance to the area, the *Svadhyaya* activity, and the leaders of the community as sources of useful information. In contrast, Meladinagar dwellers emphasised the existence of the registered CBO, a body absent at the time in Nitinagar.[99] The CBO was specifically recognised as a means to facilitate the improvement of living conditions for the community with regard to the SNP and group saving options. Other than in Nitinagar, it is interesting to note how much more capacity Meladinagar residents have in mobilising formalised risk reduction assets such as bank accounts, insurances and even share certificates. Complementing this aspect is the availability of various skills for self-employment. These means are not accessible or available to Nitinagar residents. Thus while Meladinagar residents are better enabled to *reduce* some of the risks faced, in Nitinagar people have to engage more in *adaptive* activities in risk response.

[99] The role and functioning of community leadership and the CBO is analysed in detail in Chapter 8.1.1.

VI. Risk Scenarios in Two Slum Settlements

In order to illustrate the variation of individual opinions, which may differ from the content presented in table 6.3, it is interesting to explore the context of risk coping and resources by exemplifying some of the statements furnished in depth interviews (tables 6.4 and 6.5). The column titles in the tables display the topics discussed. The first two columns of the Nitinagar table display a broad idea of the perception the residents have regarding their neighbourhood. Interestingly, they do not agree about their areas, but generally have difficulties to come up with positive factors. Even in the first column residents express a more negative perception about the area as a whole. Those with a more positive notion say it is safe for children because neighbours care and help each other, they trust in their goddess, or simply have a rather rational, utilitarian concept of a good area that emphasises livelihood opportunities. The issue of jealousy is of special interest, as several people referred to this phenomenon, pointing out that jealousy always surfaces when a household attempts to improve its living standard. This would upset the neighbours and attempts to prevent such moves arise, for it is not deemed correct to elevate oneself if the rest of the community cannot afford it.

The last three columns concentrate on constraining factors and responsibilities. These mirror a notion of helplessness due to illiteracy and a feeling of inferiority, noticeable in statements such as 'life is not worth living' and that the more educated, i.e. the leaders, should take initiative. Apparently, the tenor is that the community needs more cooperation from within to arrange for mitigation of risks, while at the same time the leadership is questioned and not entirely trusted. Self-organisation is viewed as lacking, partially due to the selfishness of residents and disagreements. Yet it is also pointed out that they feel neglected by the municipality, which, people feel, is related to their underprivileged status resulting in the demand for greater government interest.

In stark contrast to Nitinagar, residents of Meladinagar mainly have a positive notion of their neighbourhood regarding hard facts such as public amenities as well as soft issues like unity and cooperation amongst the neighbours. Statements referring to the negative impression in column two are similarly unanimous. Within the area the liquor bar and its impacts on the residents is perceived as the cause for much nuisance. Column four brings up several remarkable issues besides the above mentioned why people believe their risk coping would be inhibited. This comprises of social constraints for women in the public domain, poverty in the widest sense, corruption (with respect to the liquor bar) and illiteracy. These are all complex and inherently structural problems having their roots in the society, policy making and politics.

Complementary issues in columns five and six are revealing in this respect. One respondent, for example, asks for more participation in government planning schemes and more responsibility from factory owners in creating jobs. This is a remarkable statement, but unless the residents have sufficient unity and organisational skills (see column six), it is unlikely that such demands materialise. The last column shows clearly that the organisational back-up by the CBO and leaders is still missing, even though it is understood that people have a predominantly good relationship and feel united (see column one). The residents recognised they too have to contribute, apart from the CBO and the leaders. Despite the AMC being viewed as one of the public bodies responsible for dealing with certain issues, it is generally considered less effective. What is only partially disclosed in this chart are the relationships between various actors, this is taken up in Chapter VIII.

Table 6.4: Nitinagar - The Context of Resources and Risk Coping by Case
(based on depth interviews)

	Reasons for being a good area	Reasons for being a bad neighbourhood	Risk coping measures	Limits to risk coping	Resources needed to tackle risk situations	Who in community responsible to reduce risks
man (leader)	trusts goddess as guardian of the house	gambling and drunkards have bad impact on children	trusts the gods AMC relatives	no government interest in their problems	----------	----------
woman	safe for children to play inside the area, neighbours care	no drainage/ sewerage, have pit holes in front of the houses	avoids public tap (queue, bad quality), gets up early to fetch clean water elsewhere	have to borrow money always: stress to find sources for borrowing money	emphasises they are simple people with a few resources: they need co-ordination, funds, information, government interest and more initiative	feels it is morally wrong and not worth living a live in which the responsibilities cannot be taken by them
woman	overall negative feeling about area, good neighbours but they do not help out	neighbours are jealous if somebody able to improve living standard	private doctor, refuge in AMC school during flooding	no coordination among residents; no trust in community leaders; high vulnerability towards flooding	government should take more interest in them; leaders viewed as responsible for SNP implementation, but at same time suspicion	people are selfish, do not assist each other: they do not take responsibility to reduce risks
woman	neighbours help each other; people have a good relationship	cannot think about negative aspects in terms of her neighbours	relatives and neighbours; goddess Durga guides her	no risk coping without worshipping the goddess: "If we forget Durga she will restrict our coping mechanism."	cooperation of family; government support	leaders have limited responsibility, residents have to cover up
woman	a rational, utilitarian concept of a good area: "wherever we can stay to live is good"; area is convenient because able to borrow money and do business	public facilities	sale of ornaments and jewellery	harassment at water pond, loss of utensils; dependence on moneylenders; neighbours do not help out	people should organise themselves for coordination	literacy valued as a resource for progress: better educated people like leaders are responsible in Nitinagar
couple	negative perception of area: they believe there is nothing positive about the area	jealousy in the area if anyone makes progress	moved out of city during riots	not the right leadership (nobody wants to lead); lack of coordination; illiteracy, hence neglected by government	government support; neglect due to illiteracy; guidance should be given, how to work and communicate with the government	no suitable person in community; no responsible person, current leaders not the right persons

Table 6.5: Meladinagar - The Context of Resources and Risk Coping, by Case
(based on depth interviews)

	Reasons for being a good area	Reasons for being a bad neighbourhood	Risk coping measures	Limits to risk coping	Resources needed to tackle risk situations	Who in community responsible to reduce risks
Female (widow)	children are safe, trusts the neighbours; availability of public sanitation	anti-social behaviour/ activities, liquor bar	uses personal contacts to find work; borrows money regularly from parents; consults private doctor	constraints as woman/widow in male/public domain: a) 'social fear', b) harassment at workplace	employment and funds	CBO leaders most responsible
Male	public amenities and infrastructure in area and vicinity (school, hospital)	anti-social behaviour (the liquor selling in the area is most disturbing to him)	AMC Zonal Office (phys. infrastructure issues); take on any casual job	insufficient financial resources; nobody listens to the poor	funds; information; initiatives by people of the community; government interest	priorities: a) CBO: does not respond to them, lack of communication between CBO and community, b) AMC officers, c) residents' community: never takes initiatives, never goes to the authority
Male	cooperation between all the people in the area; riot safe; employment opportunities nearby	gambling and pollution	financial crisis: relatives, employers, moneylenders, neighbours; infrastructure problems: AMC's Zonal Office	poverty ("We have lots of risks because we are poor, poverty is our limitation."); difficult to access formal banking system	participatory understanding of development: AMC should ask them about their needs before implementation of any scheme; financial crisis major problem: factory owners should design policies for poor labourers	AMC; corporate sector; family members for social crisis; community itself
Male	unity of residents in area; rent affordable; infrastructure facilities; business relations	anti-social activities	financial crisis: first he approaches relatives, then moneylenders, lastly his neighbours	corruption	aid from outsiders; higher unity (possibly better organised?); funds	police; AMC and govt.; community of area
Male	appreciates unity of the community and cooperation between the people	liquor bar and gambling (viewed as hindrance for marriages)	Financial crisis: moneylenders; sale of jewellery; SEWA insurance	illiteracy; riots & urbanisation cause influx of tribals: higher competition in labour market	funds	leaders have responsibility

However, when it comes to reducing and coping with risks, the resources available in Nitinagar are much less and mostly of non-monetary type than in Meladinagar. Yet Meladinagar demonstrates a deterioration of available resources. Talking about the response during the riots to manage the difficult circumstances, one resident recalled how their situation differed from earlier times, when they had sufficient resources to bridge such periods of social unrest better. Asserting that during the riots they could not pursue work and hence suffered from financial stress, he pointed at his barrels saying that in the past (about two decades ago!), the same barrels were always kept full with rice and wheat. But nowadays they have become empty barrels. This illustrates again that there is a notion of the decreasing living standards in the area, and with it a feeling of higher vulnerability to such events. The residents notice that they have been continuously robbed of their assets in recent years.

6.4 Conclusions: Area Risk Profiles

Despite many similarities, the presented findings indicate fundamental differences between the two selected slum areas. On the one hand, in Nitinagar the prevalent 'normative horizon' which defines the framework of risk construction and the foundation for the acceptance of risks is in a process of transformation. The slum networking programme and the *Svadhyaya* movement have triggered discussions about the desired future direction of the community, resulting in a lower level of acceptance regarding risks evolving especially from their employment and environmental situation. Risks are perceived largely as imposed, and within this framework of involuntary risk conditions do the people have a limited choice in dealing with them. Risk reduction in this slum area has largely been an exercise of adapting to the permanent conditions of deprivation and poverty. Nonetheless, the chance of breaking out is there now. The residents have chosen two major

opportunities. One is the implementation of the slum-networking programme to uplift their physical environment and their employment opportunities. The other one being the *Svadhyaya* movement, which many residents view as a chance to improve their spiritual life and change their general attitudes towards each other and their image towards the outside society (see Chapter 9.2.2).

In Meladinagar, on the other hand, the collective 'normative horizon' is primarily shaped by globalisation and the frustration of the residents, since their experience of being a textile worker who has the security of the Textile Labour Association (TLA), insurances and a relatively high regular income (compared to Nitinagar and casual labour conditions) collides significantly with the changing environment of employment. Meladinagar has been dramatically shaped by change (closure of mills, implementation of SNP) in the last ten to fifteen years, whereas Nitinagar underscores the situation of a large section of historically underprivileged people for whom nothing has changed in many years. Although we find similar risk spheres at work in both areas, in-depth analysis reveals deteriorating changes in Meladinagar versus continuity with almost no change in Nitinagar, at the time of fieldwork. This is a crucial statement demonstrating that the earlier baseline situation of the people influences their perception of risks and their current living conditions. Accordingly people value risk conditions in Meladinagar against their perception that the living conditions have deteriorated, whereas in Nitinagar risks are valued on the basis that life has always been very hard, and only recently hopes have increased that changes will occur with the implementation of the SNP.

Focus of the study on risk conditions in the slums has been an approach which holistically grasps interdependencies and relations between risk spheres as perceived by the residents. As the findings emphasise, the risk spheres and their conditioning factors assume their meaning and significance in relation to each other. By contrast,

an isolated analysis focusing on each risk sphere would seriously conflate the complexities and understanding in terms of the construction, diversity and contradictions of risks and risk response.

By virtue of the recognised interdependencies and the significance of a holistic picture of people's notions of risks, the matrix provides a condensed context which makes the interpretation meaningful. Of course, it can only partly illustrate the empirical reality which revolves around risk situations in which the residents find themselves. In a way, we have to accept that the matrix graphically depicts in a grossly simplified manner the risk conditions. To some extent, however, the variety of multiple connections is brought to light. By illustrating these connections, the interrelations across these spheres become much more visible in a holistic perspective on local micro level. Therefore this matrix represents in an abstract form the web within which the slum dwellers act and react. Theoretically, this exercise could be conducted for each slum in Ahmedabad. This approach of reading the matrix is a tool which can be used in identifying risk priorities particularly considering the context of a given socio-cultural environment, for it is based on depth interviews concerning the more hidden interdependencies of everyday risk dimensions.

Chapter VII

The Ahmedabad Municipal Corporation: Urban Governance and Urban Risks

"There is creative confusion on both sides of the political aisle over exactly what our AMC does, exactly what it can or should be, and what the people of Ahmedabad want it to do. We are caught in one of these historic moments of transition between old model with whose defects we have become intimately familiar, and another model still very much in the making and yet to be adequately defined" (DMI 1998: 4).

VII.
The Ahmedabad Municipal Corporation:
Urban Governance and Urban Risks

Ahmedabad Municipal Corporation (AMC) is engaged in various activities that are intended to tackle and manage the concerns of its citizens, more frequently not as a single agent but with so called partners. This trend has been reinforced and legally backed by the 74th Constitutional Amendment. In recent years a turn towards partnerships and more participation of the people raises questions in which way this paradigm of urban governance should be managed, particularly with a view to include underprivileged groups in the city.

Chapter V examines the emerging framework for disaster risk management in Gujarat State and the conditions that generate and frame risks in Ahmedabad city. This chapter relates primarily to the research objectives of understanding the position and attitude of the municipality in terms of urban risks and development, and highlighting the structure relating to internal communication within the AMC as a precondition to its outward communicative competence.

The emphasis on the Slum-Networking Programme lies in the assumptions that this programme is the principal vehicle to facilitate communication that is potentially related to urban risk management, and reflects the partnership approach in urban governance. The SNP is discussed with respect to its institutionalisation within the AMC as a measure of commitment towards pro-poor urban development. This focus was selected as the attitude and institutional structure of the Corporation are fundamental in the approach to and notion of communication. The notion of urban

risks is analysed in the context of the structure and function of the AMC, past and present, and the scope for mainstreaming this topic.

7.1 Structure of the Municipal Corporation

Municipal Corporations are the highest and most autonomous form of city governance in India. Provisions of the Bombay Provincial Municipal Corporations Act, 1949 (BPMC Act) made Ahmedabad a Corporation from 1st July 1950 (Venkateswarlu 1998: 236). Obligatory functions according to the BPMC Act include among others public health and sanitation, water supply, and public safety. A long list in the BPMC Act provides for 42 discretionary functions like construction, provision of transport, non-primary education, and the supply of electrical energy. In practice the functions and role of municipalities have been increasingly undermined and encroached upon by parastatal agencies and state governments (Vira and Vira 2005: 46, 53). Organisational shortcomings that have been reasons for operational bottlenecks, corruption and mal-administration in the existing fragmented form of local government aggravate the situation (Dutta 1992: 18, Venkateswarlu 1998: 236-37, Ravindra 2006: 530).

The Corporation is divided into a legislative (or deliberative) and an executive body. It is characterised by the statutory distribution of powers between three authorities, namely the elected Council or Corporation including the Mayor, the Standing Committee and the Municipal Commissioner (BPMC Act, Ch. II, Sec.1). This separation of executive powers and functions has led to a highly fragmented executive system. The political body of the Municipal Corporation consists of Councillors (or Corporators) elected for a five year term.[100] The Mayor and Deputy Mayor are elected from the ranks of the corporation for a period of two and a half years. Holding a position of great prestige and honour but without executive

[100] The actual number of Corporators is related to the total population. In 2005 the Corporation consisted of 129 Corporators (AMC 2005: 119).

power, the function of the Mayor is primarily symbolic. The Mayor is the link between the Council and the Commissioner, and much depends on his charisma and leadership capability.

Figure 7.1: Organisational Structure of the Elected Body, AMC
(source: AMC 2002d: p.39)

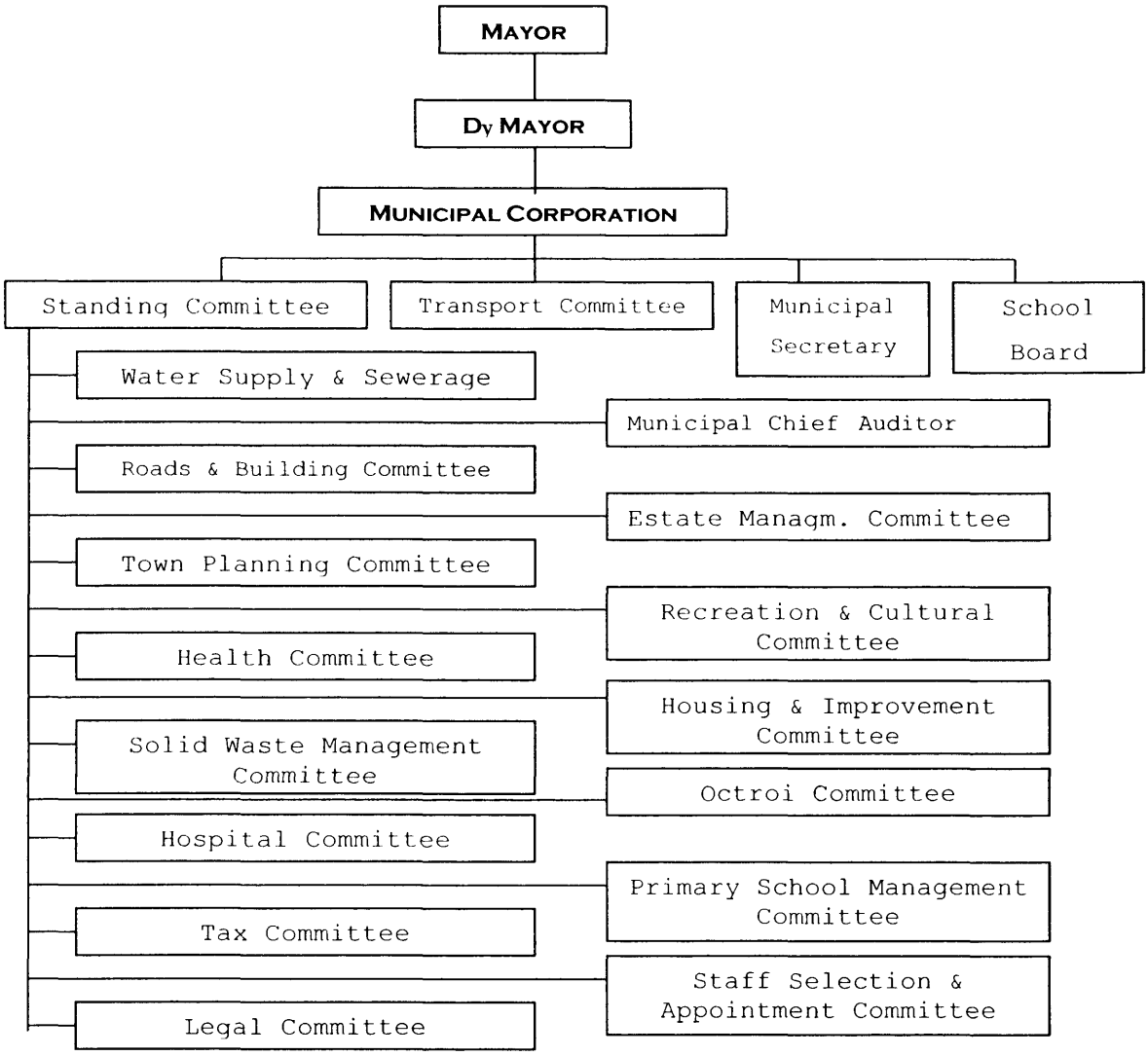
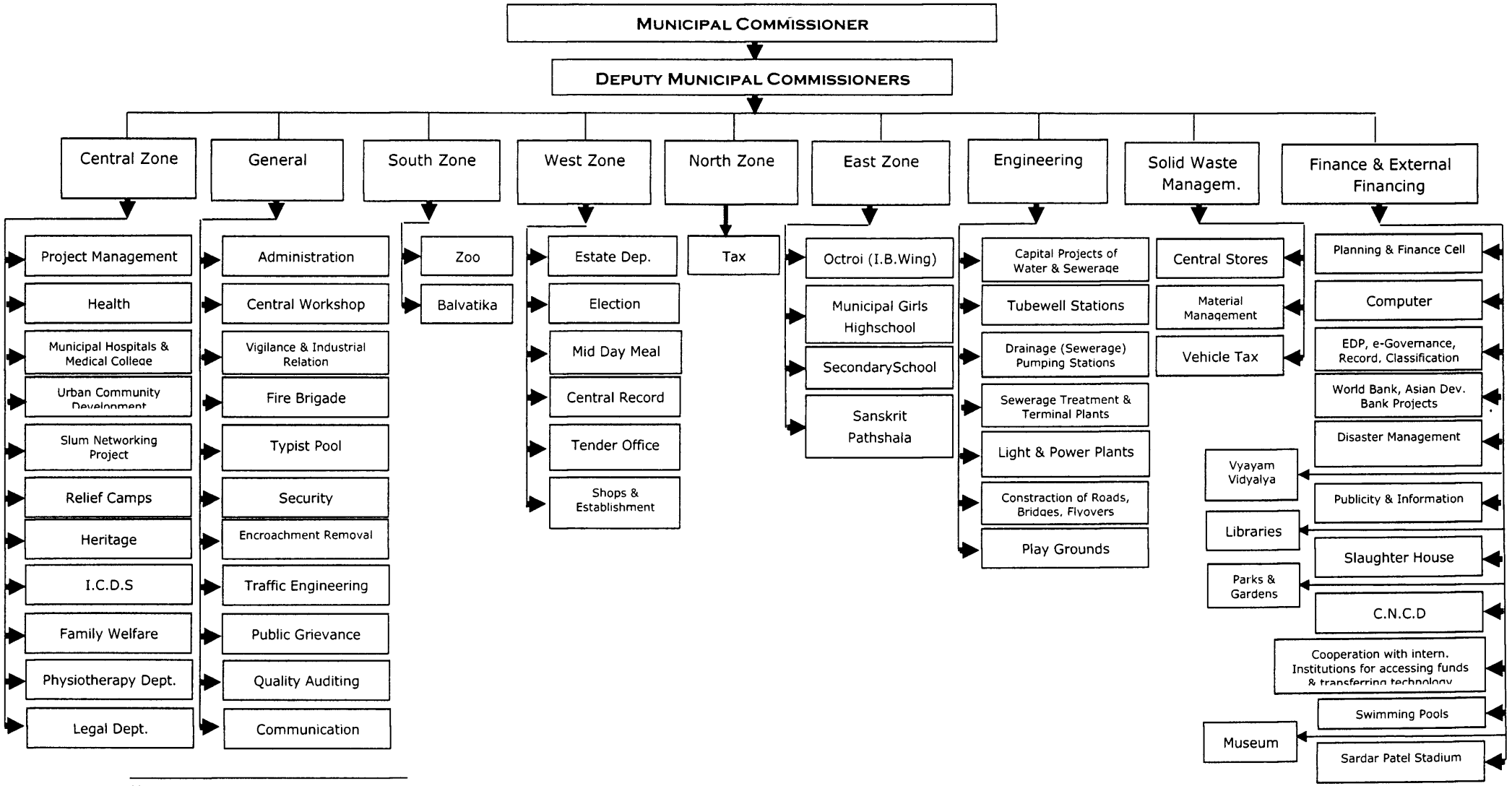


Figure 7.2: Organisational Structure of Administrative Wing of AMC (source: AMC 2005: 122)[99]

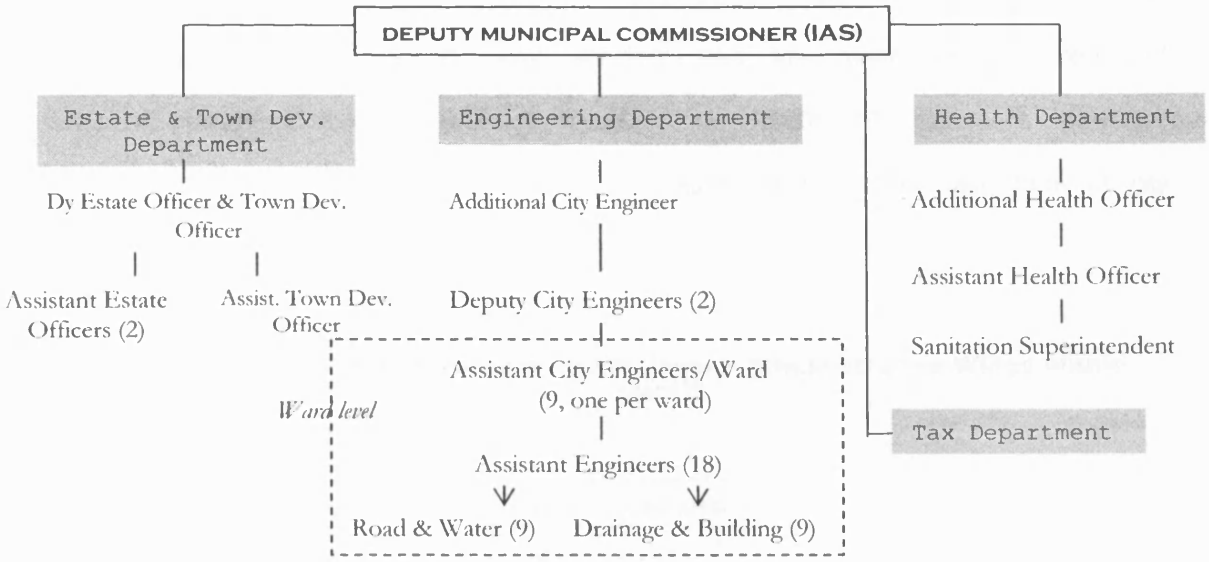


[99] Note: Strangely, the Town Development Department is not displayed in this organigramme. As to my knowledge and in other versions of this structure it comes under the purview of the Central Zone.

The Council also elects the Standing Committee (BPMC Act, Ch. II, Sec.20-24), which is in effect the steering committee and a bridge between the Commissioner and the Corporation. Its executive function is limited, as whatever is agreed can only be implemented through the Commissioner, and he plays the largest part in setting the agenda of the Committee's discussions. Other functional committees have been created as well (BPMC Act, Ch. II, Sec.30-31, figure 7.1). Committees help in decentralising the functions of the Corporation and ensure greater involvement of the Corporators in a consensual decision-making pattern. Moreover, they provide the link with the State Government and other agencies, and ensure accountability of the administration (Batley 1992: 18, Pinto 2000: 122).

The Ahmedabad Municipal Corporation is structured functionally and territorially. In 1993, in conformity with the Constitution (74th) Amendment Act, 1992, and its notification, amendments with respect to regular and fair conduct of elections, civic functions of urban local bodies as envisaged in the Twelfth Schedule of the Constitution and the constitution of a Finance Commission were carried out by the Gujarat Government to the Gujarat Municipalities Act, 1963 and to the Bombay Provincial Municipal Corporations Act, 1949. But no actual devolution took place as functions like regulation of land-use and town planning have not been devolved fully (AMC 2005: 117-119). However, the delay of implementing political reforms did not prevent changes in the decentralisation of the administrative structure. Following administrative reform in 1994 from a "vertical-rigid-hierarchical system to a horizontally-more-interactive system" (AMC 2003: 86), Ahmedabad has been divided into 43 wards comprising five zones, each of which is managed by a Deputy Commissioner (figure 7.2). The Zones are further decentralised into wards with three major responsibilities comprising engineering, health and sanitation (figure 7.3). Each Zone is vested with complete authority to address local problems and mitigate them at the source.

Figure 7.3: Organisational set up of a Zonal and Ward Office, AMC - example of East Zone
(source: AMC Diary 2002: 61-62)

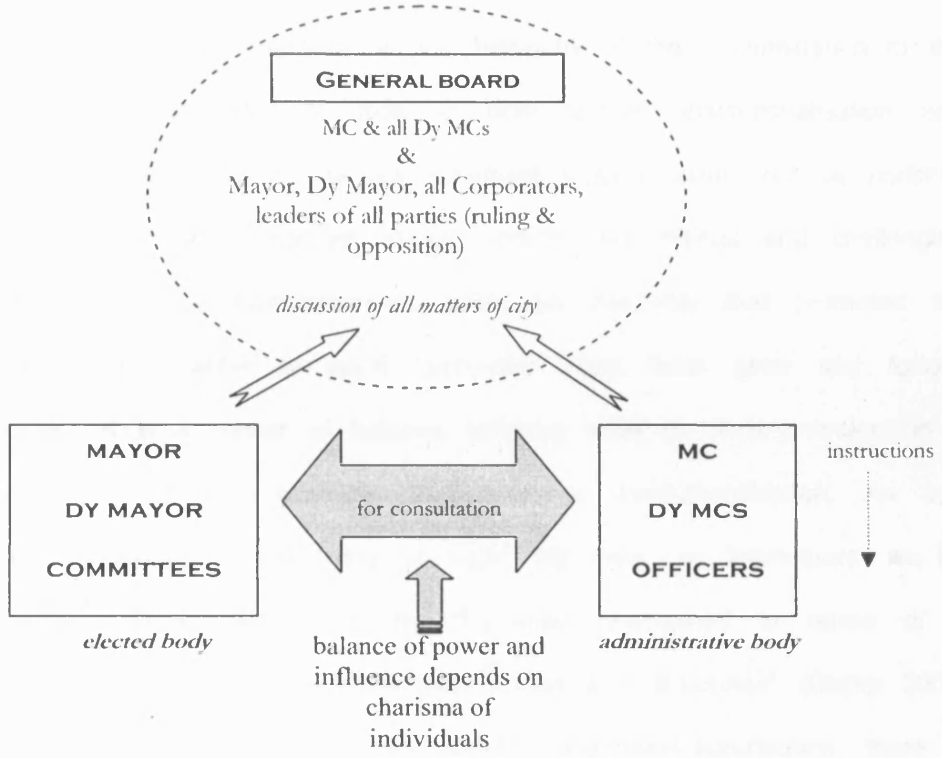


The Municipal Commissioner, an IAS officer representing the State at the local level, is the chief executive who is appointed by the State Government for a period of three years (BPMC Act, Ch. II, Sec.36). In reality though, Commissioners rarely last for more than one or two years being replaced whenever the political situation changes in the State Government. The Commissioner is assisted by eight Deputy Municipal Commissioners (IAS), and one Assistant Municipal Commissioner (IAS). Apart from the zonal functions, Deputy Commissioners are also endowed with the additional responsibility of coordination, guidance and policy decisions of city functions as are listed below the various zones in figure 7.2. There are three Deputy Municipal Commissioners who are in charge of the central city functions of Finance, Engineering and Solid Waste Management. No zonal responsibilities have been given to them.

The commissioner has a wide range of deliberative, executive, emergency and financial powers. In fact, the Commissioner is independent within his own specified sphere of activity, subject to control and general supervision by the Corporation and the Standing Committee only. In this form of urban government, the Commissioner is very powerful, and much depends on his personality and

capability. A strong Commissioner has the potential to exert influence on policies and decision making, and therefore a change in the office of the Commissioner has always repercussions on the priorities of governance. Even though this may have a positive impact on the city, scholars view this model as "outdated and defective, unsuited to the present times" (Pinto 2000: 19), since a powerful, appointed executive represents a bureaucratic rather than a democratic form of city management.

Figure 7.4: Formal Relationship of the Political – Administrative Wings within AMC[100]



Baxter et al. (1998: 85) point out the reason for tension between the bureaucrats and politicians are found in their differing functions (figure 7.4). While a politician should be responsive to his electorate and therefore usually has short term gains in mind, bureaucrats are more concerned with rules, regulations and procedures without having to worry about being re-elected. The coming into existence of the SNP is a good example in this regard. Progress and success of such a

[100] Based on personal communication with the Assistant Public Relations Officer, AMC.

programme depends greatly on the attitude and commitment of the Commissioner, because eventually the Corporators have little say in policy. Consequently at the beginning of the SNP, Corporators wondered why the slum dwellers should pay any financial contribution at all, as for the Corporators it was a way to acquire votes by promising services for free. Only when the pilot phase proved successful were most Corporators convinced. Often it is the Commissioner, a well educated IAS officer, who introduces new ideas, mediates and negotiates with the Standing Committee about projects and programmes.

This institutionalisation of novel initiatives combined with the personality of key officers can be traced to the mid-level in the hierarchy of the administration of the AMC. However, it is important to look at both factors, institutionalisation and personality. Mere institutionalisation, as one informant argued, would not be possible or advantageous, and always requires strong persons for difficult and challenging tasks. Hence a type of institutionalisation would be desirable that promotes the capacity building and potential of public servants, helps them grow and fosters learning processes. It is a matter of balance between what is more prevalent in a politico-administrative system, charismatic leadership or institutionalisation. As one prominent Indian sociologist by referring to such 'big men,' or 'Mahatmas' as he calls them, writes, development must be "[...] also understood in terms of a society's adherence to universalised institutional norms and structures" (Gupta 2001: 41). Gupta's argument is that in societies which resist institutionalisation, there is always a need for great people. In his eyes the low level of institutionalisation in India reveals the poverty of social ethics and an absence of concern with 'the other', reflected in the fact that only when somebody has wealth, power and reputation attention is paid to him (Varma 2004: 39-51).

7.2 Characteristics and Style of Urban Governance

Summarising efforts of changes in governance in Ahmedabad, Kundu (2002b:161, 166-73) lists the transfer of powers and responsibilities from the Centre and State to local administration, the involvement of NGOs and private companies by the AMC in the provision of civic facilities, and the design and implementation of schemes through participation of community groups and households. An additional positive factor in the city's governance is that the AMC is one of the few municipal bodies in the country credited with an almost continuous sequence of elections in the entire period of its existence (Dutta and Batley 2000, 65). Only on two occasions has there been no elected body, in 1974 and from November 1993 to June 1995. This last period was crucial, because it enabled the then Commissioner to initiate a distinctively transformational course. These activities[101] embraced particularly the mobilisation of financial resources through octroi and property tax, but also the initiation of various partnership programmes and reforms in the administration, which lead Dutta (2002: 248) to comment, "the AMC [...] is reckoned to be one of the better administered municipal bodies in the country."

Nonetheless, results of a SWOT analysis undertaken for the City Development Strategy on the state of urban governance in Ahmedabad expose critical issues in the governance system (table 7.1). As noted, while there has been a remarkable drive in transforming the public administration, reform of the political system received much less attention. Ward Committees as proposed by law in the 74th CAA are still non-existent. These committees would be comprised of elected corporators from the respective wards and have an advisory role. Their responsibilities include setting priorities, general supervision, and speedy redress of grievances. The authors of the City Development Strategy (AMC 2003: 89) observe in this respect a lack of will and support in implementation of the provisions of the 74th CAA thus: "[...] actual devolution of functions like regulation of land-use,

[101] Dutta and Batley (2000:74-75) give a comprehensive overview of the development initiatives under his leadership.

town planning with development authorities, safeguarding the interest of the weaker sections, promotion of cultural, educational and aesthetic aspects have not been done completely and the state government exercises control over such functions. The absence of Metropolitan Planning Committees as envisaged by the 74th CAA has limited the functional role of the ULBs in planning and management to a series of sectoral and departmental plans and programmes which under no circumstances can lead to integrated planning and development of ULBs." Similarly Devas (2000: 11-12) concludes, responsibilities are divided between a great range of special purpose agencies such as development authorities, slum clearance boards, and public utility companies that often operate in competition with each other and the municipal authority, and in most cases with minimal accountability to the electorate.

Table 7.1: SWOT Analysis on Urban Governance in Ahmedabad
(adapted from: AMC 2003, Annexe 1.2, page VI)

Strengths	▪ recent history of dynamism in the AMC ▪ administrative commitment
Weaknesses	▪ everything depends on the commissioner, when he changes, priorities change ▪ no co-ordination between departments and agencies ▪ corruption ▪ no transparency in decision making ▪ no desire to share information, not even by-laws are published ▪ no work norms and personal liability of officials ▪ frequent change of municipal commissioner and other officials ▪ lack of sufficient professionals in the AMC ▪ inadequate human resource development opportunities for municipal officials
Opportunities	▪ establish a professionally trained second line (if not first line) of city managers ▪ outsource selected functions
Threats	▪ political interference in administration

In appraising the impact of globalisation on the governance of Ahmedabad, Mahadevia (2002b) critically reviews the city beautification projects such as the Green Ahmedabad Partnership, CG Road Development, and others still not implemented (table 7.2). In Mahadevia's view such projects reflect the ambitions of Ahmedabad to acquire a stake in the global game of economic development and do not benefit the poor and slum settlements. Most of these projects are located in west Ahmedabad and are characterised by a strong drive for privatisation and

private investor involvement to fund public utilities. A large scale commercial project such as the "Sabarmati Riverfront Development" may affect some 8,000 slum households which have been residing on the riverbanks for the last two generations. Their relocation is justified by arguing on grounds of safer sites, including their upgrading. This development would not genuinely incorporate the slum settlements. Rather reflecting the AMC's and urban planners' perception of slums and their risks, the project wants slums to become invisible in the city, the old and conventional attitude to slums that perceives them just as a temporary condition in the process of rapid development (Mahadevia 2002b: 119-123).

Taking into account these initiatives in urban development, Mahadevia argues a significant change has taken place since the mid-1980s. The AMC has moved towards market-based solutions to urban development, which became even more evident in the 1990s in the context of market liberalization and globalization: "When the AMC depended on its own resources for city development, it was able to take care of all dimensions of urban development and was more tolerant towards the interests of the low-income groups in urban space. [...] *the city development processes that were inclusive have become exclusive*, serving the interests of the segment of the city's elite that wants to globalise" (Mahadevia 2002b: 123; author's emphasis). Mahadevia takes a critical stance towards the mode of urban governance in Ahmedabad than the more optimistic perspective presented by Dutta and Batley (2000). In her eyes, the AMC has historically been a welfare body on account of its actions in areas such as provision of basic services, education and health. It appears this assessment of the changing attitude of the AMC fits in with the national trend that is observed in other cities of India, where "Attempts have [...] been made in 'select global centres of the future' to provide land at preferred sites to upcoming activities through the market. [...] The low-income and slum colonies are the obvious candidates for relocation to city peripheries" (Sivaramakrishnan 2005: 53-54).

TABLE 7.2: PROPOSED MAJOR URBAN DEVELOPMENT PROJECTS IN AMC/AUDA AREA (source: http://www.vibrantgujarat.com/index.html; AMC 2005)

Project Title	Salient Features and Institutional Arrangement
Metro Rail Project	▪ North-South Corridor (Ahmedabad – Gandhinagar), East-West Corridor ▪ Phase I operational by 2010, Phase II by 2035 ▪ Government of Gujarat invites greater private participation for these projects
Sabarmati Riverfront Development Project	▪ Construction of embankments, Reclamation of land, development of new public gardens and promenades, parking facilities, allocation of adequate serviced land along the river for relocation of households affected by the project ▪ Sale of land for residential and commercial development to finance all of the above developments ▪ SRFDCL has plans to develop the entire project through self-financing route ▪ SRFDCL invites private investors / financial institutions / venture capitalists/ private infrastructure funds to participate in the proposed project by providing full or partial funding of the project cost
Lake Development & Privatization at Ahmedabad	▪ out of 645 lakes 22 were identified which have been severely degraded, of these 22 lakes, AUDA has proposed to undertake revival and development of 10 lakes ▪ the project envisages the development of the lakes with private sector participation
Lake Conservation in Ahmedabad	▪ construction of structures, housing colonies, roads and inadequate capacities of cross drainage works have blocked the inflow of water especially in the lakes located in city areas ▪ to revive and conserve these water bodies, the AMC plans to undertake a lake conservation program on a private public partnership basis ▪ private parties will be responsible for removal of encroachments and related rehabilitation, preventing encroachment, develop suitable inlets to receive storm water, etc. ▪ models of joint participation may be a mix of development rights to develop and run the adjoining land as an amusement park, health resort, water park, food courts, etc.
City Centre at Ahmedabad	▪ AUDA proposes to develop up a "shoppertainment" complex near Vastrapur lake ▪ development of following infrastructure has been proposed: Shopping Mall, Mini-theatres, Community Hall, Health Centre, Food Mall, Parking Space ▪ AUDA invites expression of interest from private developers
Infrastructure Development in AMC and AUDA Areas	▪ AMC and AUDA have proposed a total of 25 infrastructure development projects such as development of flyovers, river bridges and railway over bridges in order to minimize the problem of traffic congestion ▪ interested private parties are invited to participate in the development of the identified infrastructures ▪ private parties would be responsible to finance, develop and maintain the proposed projects

It is only recently in the City Development Plan for Ahmedabad (AMC 2005: 146) that the rhetoric has changed with the proposing of a more comprehensive urban poverty alleviation programme which addresses reduction of inequalities through *chawl* reconstruction, livelihood restoration and social security. The SNP is also part of it, but the future of the programme is uncertain, and the approach itself, may be argued, "is a manifestation of neo-liberal paradigm of development that takes away the state from performing welfare role in the name of promoting engagement

of civil society" (Acharya and Parikh 2002: 312). So, following Mahadevia's argument, many of the extravagant urban development programmes in the city support a shift in the governance mode towards a socially exclusive development. In the following section, therefore, the SNP is explored examining its institutionalisation within the AMC as a pro-poor programme.

7.3 Incorporation of the Slum-Networking Programme in the AMC

7.3.1 The Concept of Slum-Networking

The SNP has been the foremost and longest term exercise in public private partnership in urban governance in Ahmedabad (Dutta 2000: 20-21). The principle concept of Slum Networking or '*Parivartan Yojna*', as it is popularly known, is a holistic approach in that improvement of the slums is not treated as an isolated operation as in conventional approaches, but is integrated into the city's fabric as a whole (Parikh 1995). The backbone of the project is formed equally by physical and community development. Launched in August 1996, the pilot project was carried out in Sanjaynagar, located not far from Meladinagar, in the eastern part of Ahmedabad, and was thereafter extended to a number of other slums (Tripathi 1998, UNDP-RWSG 1997/99).

Besides the ten year tenure guaranteed to the slum dwellers by the AMC, a comprehensive range of physical improvements form the foundation of the slum networking approach:

a) roads and pavements,

b) storm drainage and sewerage,

c) toilets to individual households,

d) water supply to individual households,

e) street lighting,

f) earthworks and landscaping,

g) solid waste management.

In addition to the physical improvements, community development in fields like health care, employment generation, and women's empowerment, is seen as a crucial part of the programme, as overall improvement of quality of life for slum dwellers cannot be achieved, unless the economic, social, educational and health conditions change (B+SHF 1997: 21). The crucial element of the programme is the partnership between the slum communities, the AMC, a private partner, and NGOs. A significant factor for the partnership situation is the sharing of costs, since this reflects the intended equality of all partners and their proposed tasks during implementation (Tripathi 1998: 49; see table 7.3). Moreover, tasks should instill a feeling of 'ownership' especially in the slum communities, rather than facilities that are 'given'. However, the so called 'industrial partners' like Rotary and Lions Club were never involved in more than funding after the pilot project (Appendix 6.1).

Table 7.3: Cost Sharing Formula in the SNP per Stakeholder

Physical infrastructure	
Household	Rs 2,000
Private sector (industries)	Rs 2,000
AMC	Rs 2,000
AMC (toilet per unit)	Rs 4,500
Community development	
AMC	Rs 700
NGOs	Rs 300
Connection to city infrastructure	
AMC	Rs 3,000
Total per unit	**Rs 14,500**

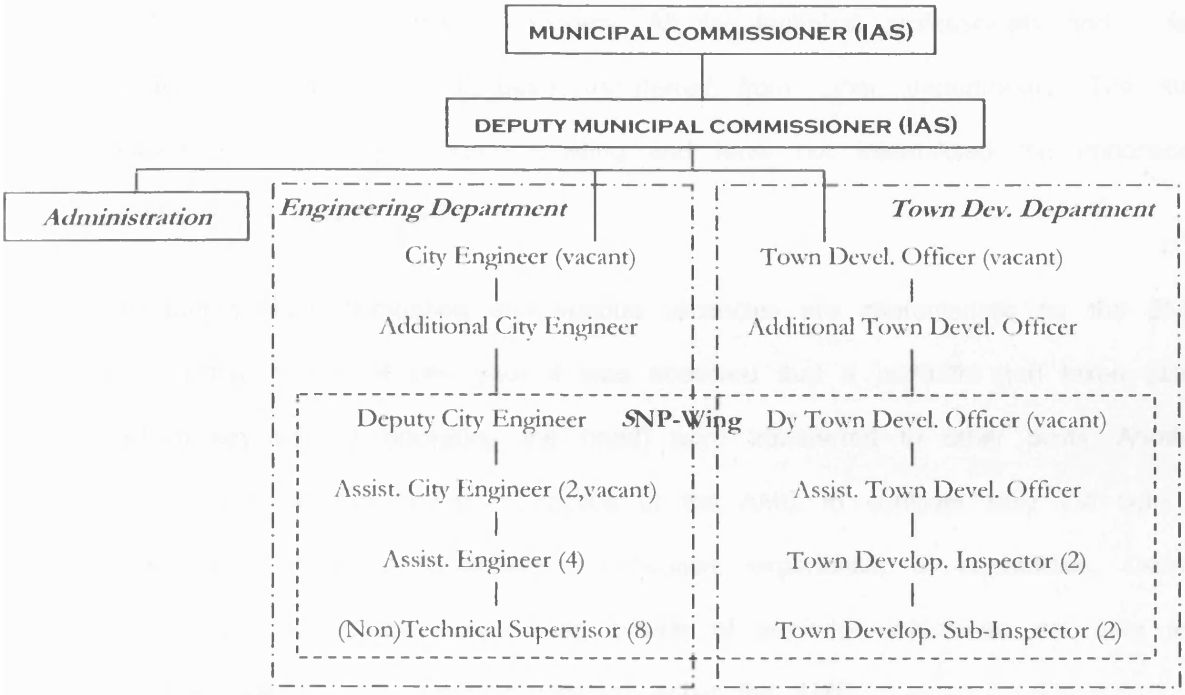
source: Gujarat Mahila Housing SEWA Trust, n/d :4

7.3.2 Structure and Staff Qualities of the SNP-Wing

Within the administration of the AMC, the SNP-Wing is a special unit to implement the upgrading of the slums in the city. The SNP-Wing was set up in 1995 in order to concentrate all relevant activities in one body and to guarantee efficient communication between the AMC departments involved and with the partners, i.e. the industry, NGO and community (Acharya and Parikh 2002: 325;

Tripathi 1998: 82, 103). That is why the SNP-Wing, headed by a Deputy Commissioner, comprises of three sub-divisions, namely Engineering, Town Planning, and Administration for budget allocation and staff (figure 7.5). The figure illustrates how the SNP-Wing cuts across the two departments Engineering and Town Planning. Nonetheless, the line of accountability above the actual SNP-Wing runs formally through the Engineering Department. This provides reason for the functional and staff rivalries that arise between the departments.

Figure 7.5: The SNP-Wing within the AMC[102]



Staffing is a particularly delicate field in the SNP-Wing that brings three issues to the fore, notably double responsibilities, permanent vacancies and ownership of the process. A recent study shows that ten out of the 23 positions in the SNP-Wing were vacant[103] (Bharti and Sharma 2004: 4). Though the SNP-Cell has the status of a separate entity within the AMC, constraints are posed by many officers

[102] Based on personal communication with officials from SNP-Wing, Prof Bharti and AMC 2002c: 4.

[103] It seems the exact number of staff and therefore structure of the SNP-Wing can not be detected due to these constantly changing vacancies. Various differing organisational charts also seem to support this fact (see Dutta and Batley 2000, AMC 2001, GMHST no date). Even my informants in SNP-Wing give yet another version, on which my chart partially relies upon.

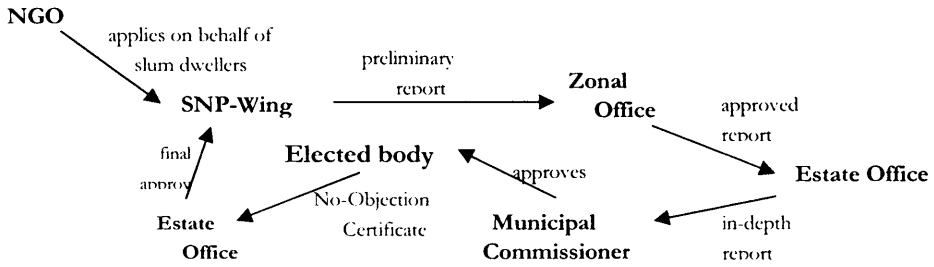
having dual responsibilities. This is especially true for higher level officers in the Engineering Department. Multiple responsibilities may lead to conflicts of interest and undermine the position and importance given to the unit within the AMC. So staff constraints in terms of qualification and quantity are some of the symptoms indicating how the SNP is valued by the AMC. However, it is not regarded prestigious to be posted in the SNP-Wing, and therefore officers prefer to pursue other kind of work. Acharya and Parikh (2002: 325) observed that "one of the principal reasons for the failure of the SNP Cell to fulfil the role as an effective co-ordinator is that this department is considered an appendage in the AMC, with limited financial and technical autonomy. All the technical professionals and a few management graduates have been transferred from other departments. The staff considers this as a punishment posting and have not internalised the importance and philosophy of the SNP."

Consequently, high fluctuation and various vacancies are characteristic for the SNP-Wing. In the course of one year it was observed that a reshuffle had taken place in which key officers (including the head) were transferred to other posts. Another inhibiting factor is the common practice of the AMC to consider only the type of vacancy rather than a candidate's qualification, experience, or capabilities. Usually decisions are guided by bureaucratic criteria of seniority, which do not take into account knowledge and expertise existent within the AMC.

7.3.3 Inter-departmental Coordination and Working Culture

As a demand-driven programme, slum areas have to apply to take part in the SNP. The process of selection within the AMC is lengthy and one of the reasons for the slow pace of the SNP. Various departments and Zonal Offices are preoccupied with this and the entire hierarchy up to the Commissioner and at times even the Standing Committee is involved (figure 7.6).

Figure 7.6: The Application Procedure for SNP within the AMC [104]



Co-ordination between departments is constrained by procedural delays, which is further compounded by an inadequate and improper information retrieval system. Such delays are partly due to unclear land titles, multiplicity of transactions and a poor record keeping system. Data such as detailed maps of completed slums are often not available, and a detailed survey of local conditions before implementation of the SNP is not undertaken by the AMC. However, inadequate co-ordination between various departments of the AMC despite efforts of administrative reform is a major concern that goes beyond the existing formalised procedures.

A case in point is the Urban Community Development Department (UCD) which has been sidelined rather than revitalised. The UCD has existed for more than 20 years, but has not been involved in the SNP. At the same time there is no professional expertise within the SNP-Wing with respect to social and community work. Interviewees emphasised that this explains the recurring difficulties that SNP officials have in the partnership with both the slum communities and the NGOs. Indeed, I could not establish any link between the UCD and SNP. On the contrary, the different approaches to community development were pointed out as a reason why they would not cooperate.

The UCD is a totally neglected department which is spatially separated from the main AMC offices and located in an appallingly dilapidated building in the Walled City. This department, which is given the position of an outpost, has no full-time

[104] Based on interviews with SNP officials and Prof Bharti.

director but is the responsibility of the head of the Statistics Department in the main AMC offices, which is far away, and naturally he has little interest in a task he is not familiar with. While the SNP has a comprehensive community development component covered by NGOs which concentrates on an entire settlement, the role of the UCD is very limited in terms of its focus and resources. Thus, only families that live below the poverty line are eligible for benefits of UCD sponsored programmes.[105] Therefore, its activities are mostly restricted to individuals or households, and not much concerned with communities as a whole. Areas of activity encompass both national and state programmes, e.g. electricity for individual households, employment generation, and health care, but also computer training. The department suffers from enormous staff constraints, as it employs only ten community workers for the entire city. UCD has been able to establish merely eleven community centres across Ahmedabad, and in each ward there is a society to manage the activities. This society supports the social workers and is supposed to multiply the work. Obviously, there would have been great scope to create synergies with the SNP.

Furthermore, coordination between various departments and levels is often insufficient due to a lack of clarity of accountability. Referring to the response to complaints submitted by citizens, one NGO worker uttered, "within AMC the coordination is a mess". This is due to some extent to a visible top-down structure that is not challenged or complemented by a bottom-up process. Many procedures are unclear, which makes it hard for the outsider or citizen to deal and comply with. More seriously, the conditions of procedures do not comply with the aims of the 74th CAA, for these were among the problems that led to its initiation. Such a top-down notion is also prevalent within the AMC's working culture. SNP officials remarked that decisions are only made at the top-level by the Municipal Commissioner and his Deputy. One officer mentioned "they have their programme", no discussions are possible, and the access to these high officers is

[105] This is based on income as measured in a survey in 1998.

very difficult. For these reasons, SNP officials maintain that the overall working culture and spirit in their department is low, caused by a lack of interest in the SNP in current AMC policies. This atmosphere differs from the mid-1990s, when it was much easier to access high level officers, and it was even possible to air a different opinion. A significant reason for this was the fact that the then Commissioner, Keshav Varma, was able to demonstrate to officers that change is possible, and even lower level officers believed they could contribute to it.

As pointed out with respect to the staff situation, personal competence has to be matched with institutional arrangements. A long-term partnership in particular has to be rooted at institutional level. It is important for organisations to internalise values and norms of a project like the SNP, and therefore it is necessary to have competent leaders along with competent staff. A transparent and participatory decision making system involving the lower staff is inevitable, but "[i]n many respects, the SNP lacks this spirit (Acharya and Parikh 2002: 328)."

7.3.4 Achievements and Obstacles of the SNP

Various impact studies positively highlight the achievements of the SNP in upgraded slums in terms of infrastructure and sanitary improvements as well as social development of residents (AMC 2002c, SEWA Academy 2002, GMSHT no date). Though there is no doubting such success stories, the question still remains as to how the quality and sustainability of the programme could be replicated with a large scale impact. Criticism is particularly pertinent with respect to the organisational set-up and implementation of the SNP (see Acharya and Parikh 2002, Dutta 2000, Bharti and Sharma 2004).

Up-scaling the programme has been the predominant issue in terms of the time and number of completed slum areas (Appendix 6.1). Given the fact that initially the SNP aimed to eradicate all slums from the city within seven years, the pace

is indeed a pressing issue. However, one official emphasised the actual achievement, namely that the SNP marked the first systematic approach of slum upgrading in the city. Whereas partial provision of services has marked the past 50 years, which depended very much on political influence and the leaders in a slum area.[106] Nowadays such approaches would be organised with a serious attempt to create a change of mind among slum dwellers and bureaucrats alike.

From the viewpoint of SEWA-MHT, the SNP has by now been institutionalised and will live on within the AMC. One indication in this respect would be the fact that the fourth Commissioner (in 2003) still carried the programme forward, even though each Commissioner had a different stance towards the SNP and never gave it as high a priority as the one who initiated it. Political support too has been demonstrated over the years on a programme level, where the SNP has been approved by all BJP and Congress governments at city as well as state levels. Besides, since the programme is well known there is also public pressure in Ahmedabad from CBOs, NGOs and slum dwellers as well as from the international public.

By contrast, other informants have been more critical concerning the successful institutionalisation of the SNP. A crucial issue for the AMC bureaucracy has been that its officials do not think of new ways of doing things, as one NGO worker observed. Instead, innovations have to come from outside. In his opinion, there is a real probability that the entire programme may be 'forgotten' by the AMC if crucial officers are replaced. The political side should not be neglected either, ever since its inception the Standing Committee has been very critical and initially even opposed the SNP. Many Corporators thought they would partly loose their local influence, which demonstrates how important it is to make them feel a part of the SNP. Hence, in order to continue the work and increase ownership of the SNP

[106] As noted earlier, this type of slum improvement is not eradicated. I have visited other slums which enjoyed and profited from political patronage by leaders who live in the slum and direct resources accordingly.

credit must be given to politicians publicly. It is, after all, common political practice to promise money and full supply of services to slum dwellers without demanding any contribution. Thus Corporators undermine AMC's systematic approach with populist politics which then results in piecemeal work.

The lack of integration of activities is a permanent problem undermining the implementation of many programmes. In Ahmedabad, Zonal Offices have their own budgets for provision of public services. This situation often poses a clash of interest within the AMC administration, for the SNP's attempt is to systematically take on slum upgrading in the entire city, whereas the Zonal Offices also provide slums with public water taps, toilets etc. It often appears that two very similar things are happening simultaneously which leads to a failure in communication as slum dwellers are not aware what is part of the SNP and what is not. Misinformation regarding costs and the feeling of being cheated leads to alienation, which in turn affects the willingness to participate in the project. Acharya and Parikh (2002: 309-348,329) rightly observe, *ad-hocism* would be the hallmark not only of all government programmes including the past poverty alleviation programmes, but also the SNP. They underline the enormous scope to integrate the SNP with other ongoing activities of the AMC.

Finally, in terms of the institutional setting the current perspective is still far from holistic. Although individual officers have gained a commitment over the years and identify with the programme, changes in the personnel structure on all levels from the Commissioner to higher officers in the SNP-Wing may lead to temporary paralysis. Officers are aware of many endogenous and exogenous limitations and shortcomings, but at the same time have a feeling of being not able to change this situation. Further constraining hurdles within the AMC include the procedures (e.g. lengthy processes climbing up and down the hierarchical ladder) and the AMC's structure (e.g. responsibilities of Zonal Offices and SNP-Wing). One informant clearly stated that in order to improve and accelerate, the programme would need

much more force and commitment from within the AMC. This is not reflected in the institutional set up, since the "SNP is only a poor cousin of the engineering department", with which few officials in the SNP-Wing wish to be identified. According to this informant, the AMC would need two things, identification and motivation of staff for the programme, and a fast forward mood to implement the SNP.

7.4 Urban Risks and the AMC

As indicated in Chapter V and anticipating the findings, the principle outcome of this investigation highlights the fact that urban agglomerations have been largely left out of the major activities of institutionalising risk management at the local level. This section concentrates on reconstructing attitudes towards risk and perceptions in various departments within the AMC focusing on how risks are reflected in urban development and planning practices.

Urban risk management became a topic for the first time in the AMC with a

Box 7.1:
Policy Issue in Integrating Risk Reduction with Urban Governance

1. History and Location:
   - profile of the poor: very vulnerable
   - land ownership: against investments in risk reduction
2. Operational Context:
   - political context: relief oriented
   - legislative context: not in favour of integration
   - administrative context: air of new partnerships
   - budgetary context: favourable
3. Capacity and Reform within City:
   - municipal functions: overloaded
   - municipal finance: favourable
   - municipal management: opening
   - departmental structure: in need of change
   - municipal systems:
     a) routine: defined
     b) emergency: not defined
4. Team/staff:
   - team capacity (general): medium
   - team capacity (emergency): excellent
   - team capacity (risk reduction): low
   - teaming and team building: new initiatives
5. Attitudes and Administrative Culture:
   - in favour of partnerships
6. Participatory Process and Initiative:
   - type: many
   - extent: increasing
   - state: mainly consultative
   - motivation: high
   - processes: being defined
   - products: slowly coming out
   - project cycle management: certain areas undecided
7. Finance:
   - municipal: available
   - GOG and GOI: routing
   - donors: ?
   - community: available

source: DMI 1998: p.5.

community-oriented Urban Risk Reduction Project, which resulted in a round table in 1998. This paper, entitled 'Policy Issue in Integrating Risk Reduction with Urban Governance', assessed how favourable the AMC´s structure and attitude towards such a move would be (box 7.1). Even though this assessment was undertaken with some euphoria in a positive atmosphere of the launch of new governance initiatives by the AMC, implementation did not occur.

The main objective of incorporating community-oriented urban risk reduction into AMC's practices and the SNP was not followed up subsequently perhaps because there has never been a popular agenda of either politicians or any of the commissioners. In addition, most of the officers who attended the round table have been transferred to other posts. Consequently, those officials who were made aware of urban risks and could have monitored progress are no longer available. This concerns officers of all levels up to the Deputy Municipal Commissioner, including the SNP-Wing. Apparently, the practice of frequent transfers disregarding experience and qualifications of officers makes difficulties for such a complex organisation as the AMC to learn from such experiences and develop an organisational knowledge.

The 2001 earthquake triggered anew the increasingly pressing issue. Within two weeks of the disaster City Managers Association Gujarat (CMAG) conducted an internal study on the response activities, and the then Commissioner had intended to develop a disaster management plan for Ahmedabad; but yet again he was transferred soon after and so the idea was dropped. To date Ahmedabad has still merely the 'classic' disaster response unit available with the police force and the fire brigade. Besides this day to day administration of the AMC, there is presently only the Gujarat State Disaster Management Authority (GSDMA) (see table 7.5).

7.4.1 Slum-Networking and Urban Risks

Within the SNP-Wing no explicit recognition of urban risks as an issue exists. Yet the upgrading of infrastructure is viewed as having risk mitigating implications. All officials admitted that urban risks are not directly addressed as an issue in the SNP, though they see infrastructure improvement as touching upon this subject. One official believes the SNP is also about improving the socio-economic security of slum dwellers, although the impact has been relatively disappointing in this area. One reason given for this attitude is that at present the primary objective of the SNP lies in the issue of up-scaling, and not introducing or integrating new concepts like risk reduction. However, the officials pointed out that the proposed Special Purpose Vehicle (SPV)[107] will be more flexible to allow opportunities for incorporating innovative issues.

Overall, health risks are given the highest priority by SNP officials with root causes being the lack of adequate basic facilities, sanitation and air pollution. Also mentioned is that people themselves contribute to air pollution by using *chulas*, which affects their health. After health risks, violence and crime are considered as posing a high risk to slum dwellers. This argument is based on the assumption that the root causes are a lack of education and employment. Besides these types of risk, floods become more a concern due to the release of water from the Narmada Dam into the Sabarmati River.

The proposed Sabarmati Riverfront Development Project, however, is the only activity with regard to the future destiny of those squatters who reside along the riverbanks. Though it is sort of dealing with the risk of regular flooding in these areas, it is principally intended to be resolved by relocation and the promotion of other, mainly commercial uses. Surprisingly, the SNP-Wing is also not incorporated as the professional authority in the planning process. When it comes to other low-laying slum areas, landscaping is not part of the SNP, at least not to the extent

[107] For details on the SPV see Appendix 6.3.

that it would be required to either raise the total level of an area or to provide flood protection through other measures. So, the quality of upgrading depends also on the topography of the specific area, as visible in the case of Meladinagar (see Chapter VI). The SNP does not consider such measures as risk mitigation and prevention.

Referring to health and hygiene as prevalent risks in slums, a Town Development Officer in the SNP-Wing expressed this has to be seen in close relation with inadequate infrastructure services and the financial limits of the residents and the AMC in infrastructure provision. He argues that the links between these risks should be taken into account. For instance, the lack of financial capacities by both the municipality and slum dwellers combine to the occurrence and generation of risks, and in this way institutionalising risks in the city. But such institutionalisation of risks comes to light even more with regard to legal issues, which occur through unauthorised occupation and encroachment on land. The absence of legal tenure and therefore lack of control frequently leads to haphazard situations of conflicting land uses. In such cases the interface of the SNP-Wing with the Town Development Department is obvious, but usually interaction of the two departments is confined to the formal application procedure for approval of the SNP in a specific slum area. It seems there is no preventive coordination beyond this.[108]

7.4.2 Public Health and Environmental Risks

Public health and environmental issues are particularly important on a city-wide level. The interface between these factors and the provision of adequate infrastructure services is evident in the two case study settlements. According to the Public Health Officer, sanitation is the main problem in the urban slums. Health issues arise especially from malaria caused by mosquitoes, respiratory

[108] A GIS data base that maps the location of slums is in process by UPP for the SNP, but whether this will be used to inform the town planning department remains to be seen.

diseases, water-borne diseases, and lack of maternal and child care health services. A pamphlet for circulation in the slums raises the issue of epidemics due to the change of season in the autumn months (Nagar Vikas Dagar, 2001), reporting of cases of vomiting, jaundice, typhoid and "a wave of malaria" in Ahmedabad.

In this context, shortcomings and the lack of statistics and databases surface as an important issue for public health management. For example, both the sewerage and storm water drainage system are two burning issues in the city. The sewerage system, especially in the east, has insufficient capacities and at places is even non-existent. Significantly, even for the 60 years old system in the walled city no data are available, i.e. no maps and no protocols. AMC can handle this because of the memory of a few long-employed elders, who simply know the system. In fact, the lack of disaggregated data is the reason that either nobody in the AMC knows the reality 'out there' or neglects the actual conditions until epidemics break out, as during the monsoon season in 2004, when due to the neglect of solid waste a number of deadly diseases such as dengue and malaria broke out in the city, thus providing a frightening resemblance of the Surat plague (see box 7.2), which was a result of the failure of local government. In Ahmedabad, thus far even the most basic initiative of creating awareness among

Box 7.2: The Surat Plague, A Disaster turned into Development Opportunity

A classic example of disaster due to environmental neglect and degradation, in September 1994 hospitals in the city reported deaths due to plague, thus causing 600,000 people to flee the city within two days and spreading panic all over the country. Following this incident, the municipal corporation did a 'u-turn' under the leadership of an inspired commissioner who turned the disaster into a development opportunity for institutional change of the urban administration. This 'Big Man' was the driving force, as he was capable on the one side to develop a vision for the city and secure the political backup, while on the other convinced and communicated the vision to the citizens. In devolving responsibilities, the commissioner encouraged decision-making of lower level officials of the corporation. As the measures to get to grips with the filth in the city included a wide variety of issues (proliferation of slums, illegal constructions, lack of drainage, inadequate drinking water supply), the case amply illustrates the linkages of urban planning with slowly emerging threats that may turn into acute disasters. It thereby demonstrates the necessity to review the understanding of disasters and of an integrated holistic urban risk management perspective. Today Surat is awarded the status of the second cleanest city in India after Chandigarh due to a drastic transformation in governance: "When the plague struck, the SMC [Surat Municipal Corporation] had no idea about the ground realities. Now there is a system in place (Outlook 2004: 36)." This system stands out as it includes collection and monitoring of health data, regular clean-up and awareness campaigns.

Sources: NCDM, 2000, p. 78; Desai, Darshan, 2004, Khoob Surat, in Outlook, October 11, pp. 35-36.

people about the importance of solid waste management and providing guidelines has been ignored with littering and burning of dry garbage continuing unchecked. On the urban region level, structural problems prevail. While the AMC has achieved partial success, the 15 municipalities under the Ahmedabad Urban Development Authority (AUDA) are nowhere near the implementation of the guidelines. Fraught with the lack of resources after the withdrawal of octroi duty, the municipalities are struggling to raise taxes to fulfil the norms (Appendix 6.4).

While the type and quality of data is significant for decision making, contemporary approaches and methods of risk assessments provide another insight into the distortion of the perception of risk. A study on environmental risk assessment in Ahmedabad, conducted collaboratively by USAID and the Centre for Environmental Planning and Technology, Ahmedabad, is such an example (USAID 1995). The study provides a reflection of the contradictions and even bewilderment that may arise from such documents. The terminology crucially reveals the viewpoint of the authors, whose usage of some crucial keywords like 'accurate measurement', 'objective assessment and judgements', 'scientific and objective process' demonstrate their conventional approach to risk assessment. Utilisation of such vocabulary indicates the view that risk assessment could be done with accuracy of measurement, and the judgements by the professionals (scientists, experts, AMC officials,) are common ground (and therefore easily acceptable) to the public, too. Such a notion of risk undermines any attempt to negotiate risk perception, as the identification of risks is separated from their management: "[...] we believe it is critically important to separate the process of assessing risks from deciding how to manage them. Risk assessment is ideally a scientific and objective process performed by technical experts. Risk management, in contrast, is a judgemental process requiring public officials[109] to balance a wide variety of concerns (USAID 1995: 7)."

[109] This displays a planning paradigm in which public officials manage 'the public interest' and communication is widely excluded in this process. Participation has obviously a limited meaning in

Thus the risk perspective underlying this approach is based on a technical-realist viewpoint of risks implying there can be technical solutions and a control over risks, in which social and institutional aspects are largely irrelevant as they are viewed as separate entities, merely relevant for the management of risks but not for their generation. This is also reflected in the definition of risk adopted by the authors that focuses on the two basic premises of the realist epistemology of risk, 'probability' and 'adversity'. The report, ultimately, is a numerical assessment of health risks and related hazards with the typical shortcomings. The single use of such documents may lead to a misrepresentation of risks, and subsequently the formulation of policies and interventions with misguided priorities in such contested discourse arenas as public health and the environment. Dominance of such 'professionalism' over citizen's participation is further visible in the rational planning system (see 7.4.3).

As Dutta and Batley (2000: 131-32) already noted, apart from the SNP which incorporates environmental services as part of upgrading, the approach of the AMC to environmental services is generally of routine nature and at best covers short term measures to prevent crisis, thereby displaying its reactive rather than pro-active attitude. Even the AUDA's Revised Draft Development Plan 2011, which includes proposals for the AMC area, makes no reference to environmental aspects, thereby missing an important opportunity for integrating these with broader land use and network plans.

7.4.3 Urban Planning and Risks

In Gujarat, physical planning is carried out under the Gujarat Town Planning and Urban Development Act, 1978[110], concerning decisions on land for housing,

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this context, where experts attempt to persuade citizens (who are excluded from the evaluative exercise) to change their behaviour.

[110] Gujarat Town Planning and Urban Development Act, 1976 came into force on February 1, 1978, under which the jurisdiction of AMC and limits of town and villages is called the Ahmedabad Urban Development Authority (AUDA). Functions and powers of AUDA are to control development

infrastructure, transportation, commercial activities and industries. Therein Town Planning Schemes provide for land use zoning and plot reservations for various public uses. Additionally, local authorities frame Development Control Regulations (DCRs) and building bye-laws to ensure public health, hygiene and safety in new constructions. In Ahmedabad, there are two principle planning authorities, the Ahmedabad Urban Development Authority (AUDA) with jurisdiction over the area outside the AMC limits, and the Ahmedabad Municipal Corporation (AMC).

Table 7.4: Threats and Risks in selected Sectors in Ahmedabad
(source: AMC 2003)

Sector	Threats and Risks
water supply	leakage and losses in water supply network, irrational and socially unjust pricing system, *talavdis* (man-made water tanks that act as rain water drains) are encroached, over-exploitation and contamination of groundwater
sewerage system	weak maintenance management, solid waste disposed in sewerage system, untreated obnoxious industrial waste is hazardous
storm water	lack of use of topographical maps, weak maintenance management, partial storm water system, sewerage connections in storm water drains, flooding at discharge points, flooding in low-lying areas
traffic	higher air pollution, reduction in green areas, no co-ordination between agencies
industries	pollution especially from chemical/petrochemical industries and textile mills
slums	unhygienic conditions may lead to diseases in the city (as has been happening already), no maintenance of common facilities provided in slums
urban economy	communal disruption
safety and security	communal violence, anti-social elements, religious heads, corruption, unemployment and disparity in education and social status

After the establishment of the Ahmedabad Urban Development Authority (AUDA) in 1986, the first Development Plan for 2001 comprising AUDA and AMC area was approved. A revised plan for 2011 was initiated in 1997 and recently approved. More recent documents are the City Development Strategy (CDS) of Ahmedabad 2003 as part of the Cities Alliance strategy and the City Development Plan 2006-2012. While aforementioned documents have statutory authority, the CDS and CDP are not legally binding, but draw together a more comprehensive, holistic vision of the city. The CDS is especially significant, containing references to the urban environment, and in an analysis reveals threats touching a variety of issues (table 7.4). This is evidence that attention has been paid to various types of risk that

activities in accordance with the development plan of the AMC area, i.e. especially water supply, sewerage provision.

have the potential to threaten the city's development. As a policy document for strategic intervention the CDS could provide a starting point for an integrated risk management framework for the city.

As noted, the fragmentation of urban management and planning due to multiple agencies allows haphazard growth within the urban agglomeration. This condition can be seen as a form of institutional risk parameter which produces risks on account of inadequate institutional design. Organisational structures and development forces together create urban risks. The flood in 2000 in the city is a case in point of such interplay between natural forces and human activity in dense urban settlements, highlighting that this link is often not considered by either citizens or authorities. During this flood it surfaced that a so-called natural disaster can occur on account of improper urban development activities. Newspaper articles reported on how the encroachment of buildings, in natural flow-off areas, creates urban risks. They revealed that the topography in Ahmedabad has not been considered much in urban development in the past, thus destroying on the one side an ancient water harvesting system of *talavdis* (a networked system of ponds) and now endangering the ground water, while on the other side generating floods throughout the city.[111]

Arguably, the practice of town planning in Ahmedabad is a matter of experts: "The process of preparing development plans for the city is considered to be undemocratic and non-participatory. The technocrats, who generally come from the upper income groups, prepare these plans. They treat town planning exercise as one of creating beautiful cities (Mahadevia 2002b: 91)." The underlying rationale of such a notion of the city aims at the 'modernisation' and 'beautification' of cities, projecting a hygienic place most desirable without slums. This perspective essentially influences the definition of what and who is dangerous and risky, and

[111] The AMC has recently envisaged a lake conservation and revitalisation project on the basis of public private partnership for five lakes in the city. All the lakes are located in the dense eastern part of the city (see table 7.2).

who or what is at risk. As a consequence of such thinking, perceptions and requirements of the low-income groups are usually not incorporated. This has been the practice of urban planning for many decades, and the recent endeavours to go global only reinforce such exclusion.

And yet, as so often, disasters similar to the 2001 earthquake emerge as forces of change in the planning system. By virtue of the large scale destruction, the municipality of Bhuj initiated for the first time a participatory planning process to be conducted by the Bhuj Area Development Authority (Kropac 2002: 30-33). In spite of the considerable shortcomings[113], this exercise indicates a move towards a more citizen friendly planning process which has never happened before in Gujarat. Whether this experience will have implications for planning processes in other cities remains to be seen. Similarly, since the earthquake Babtie India Consultants[114] has been working on a promising project "Capacity Building for Earthquake Rehabilitation" on behalf of the GSDMA and financed by the Asian Development Bank. This project is focusing on long-term seismic safety in building construction and development, but applies a multi-hazard approach including flooding, fire safety, and so forth.

Babtie's assessment of the present legislation had found that many regulations do exist, yet the implementation and enforcement especially of Development Control Regulations (DCRs) is lacking. Babtie found two reasons why it does not happen properly. Firstly, the authorities do not have sufficient staff resources, and secondly, the procedures are too casual and for developers there are no incentives to follow the rules. Apart from this, too many agencies and regulations exist, which cause a confusion of both responsibilities and non-responsibilities. The reform proposal approaches these handicaps by using an integrative perspective of Gujarat which

[113] For instance, the slum settlements were not part of the planning process due to 'time constraints'. For details of the process see Kropac 2002.

[114] At the time of the interview, no documents were available to me for copyright reasons.

links the villages with the small and middle-size towns and then up to corporation and state level. A significant problem is that most of these UDA regulations like the Development Control Regulations are copies of copies of copies. They have been only slightly changed and adapted to fit requirements of the respective city. Most of them are not revised regularly, and some are even more than 25 years old. They have been independently changed over the years since there is no overall framework in which these regulations were moulded. As a result, in all the UDAs these regulations are not based on a common sense of policy.

Therefore there is a need to create a new system and mechanisms for regulations and management at state, *taluka*, small and middle size towns, municipalities and corporations. Babtie India[115] has been asked to revise the DCRs for AUDA in order to set an example how regulations can better accommodate risk prevention and mitigation. AUDA has been selected as it is a kind of 'mother of all regulations' in Gujarat. The AMC's role within this framework may be to make use of the revised DCRs and change its own regulations to adjust to AUDA, but it is not directly affected or even obliged to change its own regulations. Eventually, a state-wide structure for regulations will be proposed in order to amalgamate them in a framework in which all regulations can be worked out according to local requirements. Gujarat is unique with this initiative, no other state has launched such a programme for state disaster management with such far reaching recommendations. Yet as another side effect of this move is the *de facto* assault on the politico-builder nexus. It remains open how far politicians will really go in the end to ensure the implementation of such an elaborate control system.

[115] A private consultant firm.

7.4.4 Responsibilities, Coordination and Preparedness

The Municipal Commissioner[116] has confirmed and backed the existing arrangements for disaster mitigation in the state. Although this Commissioner was formerly head of the GSDMA, he did not give particular priority to the institutionalisation of risk reduction in the city, but insisted that there are very clear responsibilities in terms of disaster management in the state. In the Commissioner's opinion, the command in disaster circumstances should be under one single authority, and in this regard Ahmedabad city falls under the *taluka* of Ahmedabad. Such a setting would optimise the response and resources. The argument is if there is a flood or riots, not only the cities are affected, hence an overall management is necessary. In contrast, it may be argued that it is particularly local authorities and project staff who are the implementers at community level of government development programmes. This group is actually co-ordinating most of the (disaster) risk reduction work. Specific agencies are often working on regional and/or national levels, whereas municipalities have local control over every day management (Oxford Centre for Disaster Studies 1999).

For AMC, the responsibility for coordination rests with a Deputy Commissioner. Nonetheless, while broadly three levels of disaster management exist, national, state, and district, the urban local bodies are not systematically incorporated in this structure. Hitherto only a few megacities such as Mumbai or Delhi have their own Disaster Management body. This has to do with the current institutional arrangement of disaster management in India, and for this reason there is some reluctance to establish another level in municipalities.

Response of the other departments corroborates these findings. The Fire Brigade being accountable for the AMC area and only exceptionally in the surrounding AUDA area, is deployed for almost all hazards and therefore the first port-for-call for any response. In case of an emergency, cooperation takes place with a

[116] Municipal Commissioner P. Panneervel, interviewed 22/01/2003.

number of other departments like Engineering, Public Health, Encroachment (sub-division of the Estate and Town Development Department), as well as the police. The department is principally an emergency response unit. It is only involved in risk prevention with respect to fire safety in multi-storey buildings together with the Estate Department.

Statements by the Public Health Department raise some other issues. This department is mainly concerned with registration, control and monitoring of births and deaths. Major objectives include the execution of immunisation programmes, establishment and maintenance of pay-and-use toilets, child care and an integrated child development scheme (AMC 2002b). To achieve these objectives, the department is expected to collaborate with the SNP-Wing, but the Health Officer pointed out that the small number of its officers is a problem, and therefore cooperation is very limited.

So far, Town Planning Officials conceive the GDCRs as a tool for an indirect management of hazards and pre-disaster care in the city. Indeed, in the appendices of the GDCRs some attention is given to this issue. Guidelines on land use zoning in hazard prone areas can be found (appendix A of GDCRs) referring to earthquake, cyclone and flood prone areas, and touching on the issue of flood safety in the city. Appendix B deals with the "Protection of Building Structures and Infrastructures in Hazard Prone Areas", while appendix C contains a "List of Obnoxious and Hazardous Industry". As a hurriedly added revision of the Development Plan in an immediate response to the earthquake, these regulations are still somewhat piecemeal. The topic of urban risk management has been at the vanguard since the 2001 earthquake, but the AMC town planners maintain that insufficient time has passed to properly incorporate new regulations. Predominantly viewed as a grey area and a very new field, only inadequate studies whose findings could be used are available.

Raising awareness for risk reduction among the citizens is either not part of departmental objectives or completely underrepresented. The Deputy Fire Officer contended that even if they wanted to conduct such activities, the support would be missing. Equally, the Public Health Department, which traditionally uses health campaigns to inform and educate the public, admitted to insufficient publicity and awareness building due to inadequate funds and limited staff. However, there are intentions to streamline activities of disaster management which would be of concern to urban areas, e.g. to establish a Disaster Management Institute, founded by the GSDMA and funded by the World Bank, which would also develop training modules open to citizens and public servants alike. Located in Ahmedabad, the institute as a state institution would also have a focus on urban areas. Similar institutes are planned to be established in Rajkot and Surat as well.

While such initiatives have a future scope, examining the current commitment to integrating urban risk issues in development activities within the AMC is of particular interest. In this respect, the SNP and urban development are particularly important. Most officials would agree that risk reduction is an issue. Yet as indicated earlier, especially the SNP process is under high pressure to produce solutions on the questions of how to accelerate and expand the programme in order to become a truly city-wide activity. In addition, the last major activity, the Policy Round Table of the Urban Risk Reduction Project, emphasised a community-led approach, but the AMC appears not to be prepared for such a commitment, as one public servant stated: "There is no time and also no perception within the AMC to associate with NGOs." The SNP-Wing, which is usually seen as the forerunner of practising partnership with the poor, is probably too isolated to make a significant impact on other departments.[117] This is symptomatic of the difficulties in taking up new issues and integrating them into mainstream AMC policies. Apart

[117] Notably there is a qualitative distinction to be made between partnerships like the SNP stakeholders to benefit weaker sections of the society, and those that are primarily commercial projects such as the Sabarmati Riverfront Project or developing a main shopping road in one of the most upmarket areas in the city.

from that, the commitment of the top management level is needed to push such an agenda forward.

The latest cautious move in this direction is the City Development Plan 2006-2012, in which disaster mitigation is recognised as an essential objective of the urban development of the city (AMC 2005). For the first time in such a document it contains scattered reference to disaster management and also earmarks a budget for this area. It, however, does not demonstrate a systematic approach to the issue and neglects entirely the question of responsibilities and institutional arrangements.[118] On the other side, the CDP 2006-2012 identifies the need for strengthening urban disaster mitigation by entrusting expectations in the newly established Gujarat Urban Management Institute at CEPT University.[119] With this decision, an environment is being created that is conducive for promoting urban disaster mitigation.

[118] The only reference to this is that disaster management comes under the purview of the Deputy Municipal Commissioner Finance and External Financing (AMC 2005: 133). Besides raising the question whether this function is in the right place there, no conclusions can be drawn as to whether it will be developed further into a unit or department.

[119] "The State, given the pace of urbanisation, has identified and awarded the status of university to CEPT. The institute has partnered with the State and City government in various developmental activities. The need is to equip the university to meet with the emerging challenges thrown open by the trends in urbanisation. Urban Economic Developmnet, Urban Environment, Information Technology, E-governance, Disaster Mitigation and Management, Public Policy, Technology and Design are the areas requiring strengthening" (AMC 2005:152).

Table 7.5: Risk Perspectives in selected Departments of Ahmedabad Municipal Corporation and Gujarat State Agency (continued next page)

Risk Management	Selected AMC Departments / State Agencies					
	SNP-Cell	**Town Development**	**Public Health**	**Fire Brigade**	**Urban Community Development**	**GSDMA**
risk perspective	➢ upgrading of infrastructure seen as mitigating risks ➢ Institutionalised risks: unavailability and lack of financial resources by both the slum dwellers and municipality ➢ legal issues: unauthorised occupation/ encroachment of land, no land tenure lead to haphazard situations ➢ Health risks highest priority: root causes infrastructure and air pollution ➢ Violence and crime second priority: root causes education and employment ➢ Links between these risks must be taken into account ➢ Floods become more concern due to water in Sabarmati River	➢ risk perception strongly influenced by the earthquake in 2001 ➢ legal regulations (GDSR) seen as a tool for indirect management of hazards, but different regulations contradictory (institutionalised risks) ➢ floods are viewed as a recurring problem for the city, but insufficient provisions are made	➢ sanitation main problem in urban slums: health issues from malaria, respiratory diseases, water-borne diseases, lack of maternal and child health care services ➢ rapid growth of slum population nullifies endeavours to improve provision of public health services	➢ major hazards in the city: traffic accidents and air pollution ➢ household fires: gas leakages ➢ commercial fires: electrical short circuits ➢ industrial fires: carelessness and lack of housekeeping ➢ fires in slums: household fires due to scrap storage; happens mostly in winter season when people make fire to keep warm, but not a major problem as it is in Delhi	➢ no useful statement available, excluded from topic of risk management ➢ head of department vacant, headed by officer of Statistics Department ➢ UCD totally neglected department ➢ understaffed with only 10 community workers for the entire city ➢ programmes have activities in as various areas as employment, health, electricity provision, and others	➢ founded in response to the earthquake in 2001 ➢ focus on earthquake related issues, but intention to extend range of activities to multi-hazard approach ➢ only concerned with natural disaster risks ➢ emphasis on preparedness and management

Risk Management	AMC Departments / State Agencies					
	SNP-Cell	**Town Development**	**Public Health**	**Fire Brigade**	**Urban Community Development**	**GSDMA (Gujarat State Disaster Management Agency)**
Responsibilities and functions	➢ coordination and implementation of SNP: upgrading of infrastructure in the slums of the city	➢ regulating construction and modifications (GDCRs) ➢ land use zoning (area development schemes, town planning schemes) ➢ revision of town development plan	➢ monitoring of birth and death rates ➢ immunisation programmes, reproductive child care and integrated child development scheme (*anganwadis*) ➢ in any case of emergency accountable for "all services regarding health"	➢ emergency risk response, prevention measures only regarding fire in high-rise buildings ➢ all kinds of hazards, man-made and natural, from industrial hazards to earthquakes, riots, fires, etc.	➢ for below poverty line families only ➢ unit for benefits not community, but individual households	➢ state level guidelines: disaster management policy ➢ supervision of district and *taluka* responsibilities , but not specifically for urban areas
Coordination with other departments (where applicable with view to risk management)	➢ Town Planning, Estate Dep., Engineering Dep., Zonal Offices: mainly formal procedures	➢ SNP-Cell for slum-upgrading: approval procedure	➢ SNP-Cell for slum-upgrading	➢ Engineering Dep., Public Health, Encroachment Department, Police	➢ no activities in SNP carried out, this task is seen as the responsibility of NGOs	➢ district and *taluka* agencies, local authorities
Mainstreaming urban risks and awareness campaigns	➢ no explicit integration of risk mitigation ➢ community risk reduction project yielded no follow-up ➢ reasons: no time and capacities to take on new issues ➢ too occupied with the question of up-scaling SNP	➢ regulations in GDCR with respect to hazard-prone areas referring to natural hazards still piecemeal work, have been quickly integrated after earthquake into revision of town development plan ➢ 'overhaul' of the entire planning regulatory system in Gujarat under way	➢ insufficient activities for public awareness on account of inadequate funds and limited staff	➢ some officers sent abroad for further training since the earthquake	➢ no activities to consider urban risks	➢ establish three Disaster Management Institutes in Gujarat funded by World Bank ➢ operate on state, district and *taluka* level ➢ training courses for citizens and officials ➢ no explicit focus on urban areas, these are part of the district and *taluka* management activities

7.5 Conclusion: Urban Governance and Risks

7.5.1 Governance of AMC and SNP

It became clear that institutional, organisational and structural conditions of the AMC at large impact on the attitude and capacities of how the authority is able to tackle urban risks. Specifically, a number of shortcomings of the SNP that reflect administrative and governance impediments were brought to light:

- Political interference by Corporators who are not truly incorporated in SNP implementation;
- Political power games between a) state and local authorities, and b) elected and executive body within the AMC;
- Bureaucratic procedures within the AMC cause delays;
- Innovation rarely comes from within the Corporation, but the Commissioners carry innovative potential as they are appointed from outside;
- The SNP-Wing has no priority within the overall AMC agenda, it is rather continued under different leadership because it is there;
- Within the SNP-Wing there are no staff capacities for community development, collaboration with Urban Community Development Department does not exist;
- Inter-departmental co-ordination within the AMC is haphazard, and a major cause also for parallelism of programmes due to the lack of a holistic approach; additionally, priorities of agendas keep changing with Commissioners;
- Up-scaling of the SNP, the most urgent issue, is not feasible without considerable restructuring of the partnership with NGOs and CBOs, yet this process is stagnating;
- Mainstreaming of newly emerging and cross-cutting issues is difficult, since an organisational learning process is not encouraged and institutionalised.

Table 7.6: Constraints of Urban Governance in Ahmedabad according to the Conceptual Framework

Conceptual	Parameters	Issues in Governance of the AMC		
efficiency	transparency & accountability	fragmentation of responsibilities (executive and political wings)	multiplicity of parastatal agencies	multiplicity of legislation
	administration & service delivery	lack of commitment & limited staff capacities and capabilities	long bureaucratic procedures & learning not internalised	haphazard inter-departmental coordination
equity	resource allocation	pro-poor administrative departments largely neglected & sidelined	PPPs with commercial potential get preference	
	distribution of hazards	under-serviced eastern city disproportionately affected by various hazards	particularly environmental hazards concentrated in the east	high population density in old city & highest concentration of slums in eastern city area
	empowerment[120]	to some extent in the SNP and other initiatives	frequent exclusion of underprivileged people in planning processes	
security	disaster preparedness[121]	emergency & relief oriented	overhaul of planning legislations ongoing, but implementation uncertain	integration into development planning envisaged but not implemented yet
	riot control & prevention	communalised police force	repressive atmosphere in the state & city, violence may erupt easily	relief camps established after riots, but no 'official' attempt to reconcile communities
	environmental management & urban planning	strategic intervention not discernable	process of SNP implementation too slow	no water resource management strategy, reform of solid waste management delayed
participatory democracy	devolution of decision making to local institutions	74th CAA only partially implemented	AMC has decentralised with Zonal Offices	decision making within the AMC mostly top-down
	enablement of participation of marginalised groups[122]	most initiatives of the AMC do not consider inclusion of the poor	ward committees not established as yet	vote banks, populism, and patron-client relationships dominate political scene

In relation to the above, Dutta and Batley (2000) comment on the importance of the in-house capacity to respond effectively to the needs of communication with various stakeholders under partnership and decentralisation. After all, there is no single line of accountability and no ultimate authority in the current governance model of local authorities. Baxter et al. (1998: 80) once noted, "As the Indian bureaucracy is a legacy from the British that served as a regulatory agency, the

[120] This aspect will be dealt with specifically in the following chapter.
[121] On this issue refer for details to table 7.5 above.
[122] This aspect will be dealt with specifically in the following chapter.

British did not use the government and bureaucracy for agents of social change." This constellation is hard to overcome and has been further diluted since independence.

It is only through the 74th CAA that a serious effort was made to break this tradition. For instance, capacity building strategy is manifested in the context of the CAA (in Venkateswarlu 1998, Mohanty 1997). This emphasises a necessity for institutional change. The elements to increase local accountability and facilitate local urban governance as outlined in the CAA are reflected in the principles of urban governance as presented in the conceptual framework, such as participatory democracy, efficiency, equity, and security. Though these norms are constitutional now, they would still need political commitment and willingness to be implemented on the ground. Central points of the findings were translated into the conceptual framework and are presented in table 7.6.

7.5.2 Risk Perspectives and Management

The HPC Report (2001: 43) points out a need for action in the following direction, "The urban planning, development and management process have traditionally been dealt with in a sector manner. The safe city concept, particularly due to a participatory approach, would attempt to bring about strategic integration of various urban sub-sectors and present an integrated development framework." Similarly, the UN Policy Document on Governance for Sustainable Human Development argues that "risk reduction efforts need to be based as much in urban governance and management as in urban planning" (cited in HPC Report 2001: 44). As the above analysis shows, despite some initiatives, such a deliberate policy decision has not yet taken place in Ahmedabad.

Consequently, urban risk management is not conceived of as a cross-sectoral topic within the corporation (see table 7.5). Due to the AMC's structural-organisational fabric, it is an issue that is spread across various departments. Hence the

perception of risks follows departmental lines, i.e. subject-specific recognition of risks such as health risks, air pollution, fire, etc. An integrated plan, which co-ordinates, links and channels activities of these departments does not exist. For this reason, no holistic, coherent strategic thinking within the AMC exists that links risk management across relevant departments and in policy documents beyond immediate emergency and relief measures. This is valid particularly for urban development strategies, poverty alleviation programmes, development plans and related legal documents. Activities to mainstream or at least integrate urban risks by way of participatory action planning did not succeed in a sustainable manner, as the Urban Risk Reduction Project illustrated. This topic remains to be left to NGOs. As a consequence, attention to deal with participatory risk mitigation of slum dwellers' daily living conditions remains separated from the AMC.

Apparently a culture of risk reduction has not evolved in the city's administration. Various systems of knowledge and ways of knowledge production carrying implicit meanings and constructions of risks compete at this point. The recognition of the existence and understanding of the diversity of risk scenarios as perceived by slum dwellers and the Municipal Corporation is crucial for community-centred risk mitigation measures. The next chapter, therefore, follows up on the track of communication between the development actors in order to examine how differences in the notion of risks can be accommodated.

Chapter VIII

Communicating Urban Risks: Interaction, Means, Contents

"The people have a different definition of disasters than we have, DMI. For them having not enough food due to illness and loss of income is a disaster" (DMI staff member).

VIII.
Communicating Urban Risks: Interaction, Means, Contents

Previous chapters have built the thematic foundation for communicating urban risks through an empirical exploration of slum dwellers' risk perception and the structural perspectives prevalent within the Ahmedabad Municipal Corporation. This chapter draws together the conceptual approach of urban risks and how they are communicated. It is dedicated to two objectives. The first focuses on the description and understanding of communication processes, which requires looking into aspects such as the means, channels and mechanisms of communication employed by different agents. The second objective deals with the mis-matches between different stakeholders and the reasons for and meanings of disruptions. According to the conceptual understanding of communication, emphasis is given on the procedural character of communication by focusing on the transformation of institutions and changes in partnership relations over time.

This empirical chapter is structured along the four twin concepts as elaborated in the conceptual framework. Together with examples from the case study they comprise a dense interpretation of the situational traits that characterise the communication processes of the various agents in Ahmedabad. Overall results are displayed summarily in a set of tables, which spell out the findings regarding each actor and the communicative relationship as well as impacts and limitations of the existing conditions of communication.

Table 8.1: The Four Twin Concepts and their Impact/Constraints on Communication – Power and Control

Concepts	Constituting Principles	AMC	Slum Dwellers	NGOs	Impact/ Constraints
Power & Control	➲ Social status and social capital ➲ Quality of relationships ➲ Perceptions of 'others' and 'self"[123] ➲ Roles and functions of stakeholders	Social status ▪ AMC the dominant actor as to its function as service provider ▪ many Corporators (who oftencome from lower classes) have limited capacities for networking ▪ Commissioner has potential to induce innovation Quality of relationship ▪ Corruption in SNP-wing ▪ Primarily top-down within AMC ▪ Horizontal with NGOs ▪ Barely in direct interaction with slum communities Roles and functions ▪ AMC leading role in SNP & urban development ▪ barely involved in community work	Social status ▪ very low social status ▪ stigmatised by others as filthy and untouchable Quality of relationships ▪ male dominance: gendered communication within the slum areas Roles and functions ▪ Non-existent/weak organisations in the slums ▪ Depend on NGOs for institutional capacity building	Social Capital ▪ well networked with the AMC, public institutions, researchers, international donors, local slum dwellers Quality of relationships ▪ inherent patron-client relationship with slum communities ▪ can exert influence on AMC ▪ competition among city's NGOs Roles and functions ▪ intermediary and facilitator role for slum communities and AMC	Hierarchical partnerships Dependence and interdependence of actors higher than collaborative element NGOs partially co-opted by AMC High degree of social stigmatisation AMC neglects slum communities on account of their poverty & illiteracy Competition among NGOs prevents concerted action to up-scale SNP and improve networking of slum communities Weak institutional environment in slums

[123] This aspect is described more in depth in table 8.2.

8.1 Power and Control

Power and control materialise in the relationships of stakeholders and their ability to raise their voice in a communicative process. In which way each actor is able to participate in discourses and interact with others depends on variables such as social status and social capital, the quality of relationships, perceptions of others and the self, as well as roles and functions attributed to each party (table 8.1).

8.1.1 Institutional Environment of Communication in the Slums

As highlighted in the conceptual framework, communities and the way they are organised are crucial for communication. It is in intra-communal relationships that power and control are played out with an impact on the competence to communicate within and with the outside world.

8.1.1.1 Meladinagar

Before the implementation of the SNP in 1998/99, Meladinagar had a well organised resident's group with a charismatic leader which was founded by and registered with the Urban Community Development Department, AMC. Due to this leader, Meladinagar residents got to know about the SNP without the involvement of an NGO by learning about it from people of *Sanjaynagar*[123], which is not far from their location. As figure 8.1 shows, initially the late leader got to know about the SNP. He got in touch with the SNP-wing of the AMC, SEWA-MHT and DMI which provided additional information about the scheme. Meanwhile another leader was in touch with the SNP-wing and DMI. It eventually proved important to inform all residents during a public meeting to channel and structure the information.

[123] It was the first slum in the programme to be upgraded in the pilot phase.

According to the formal structure of the existing CBO, *Meladinagar Samiti* (figure 8.2), the leadership consists of four members of which only one is a woman. A committee of seven male members represents the residents. Male dominance in community organisation goes as far back in the history of Meladinagar as 1991, when the *Meladinagar Seva Mandal*, a savings organisation, was formed by the efforts of male residents (Sato 1999: 78).

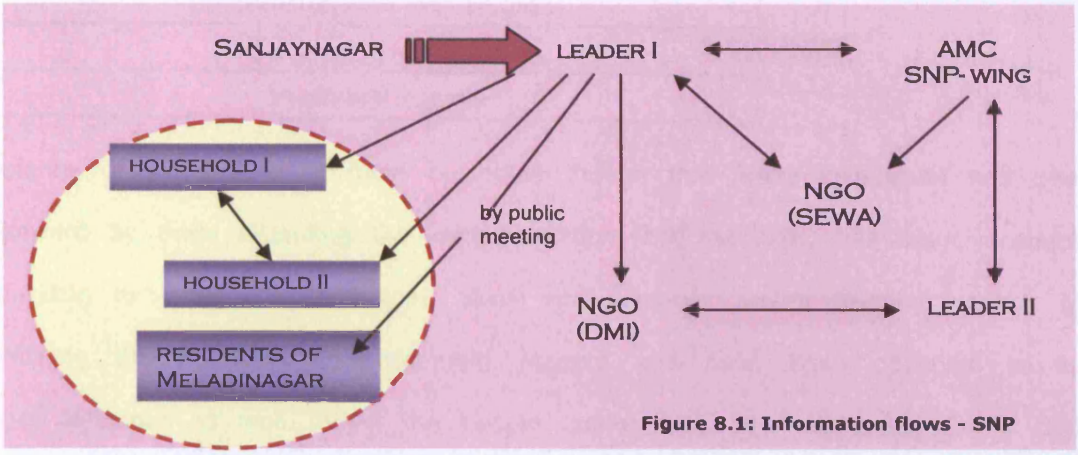
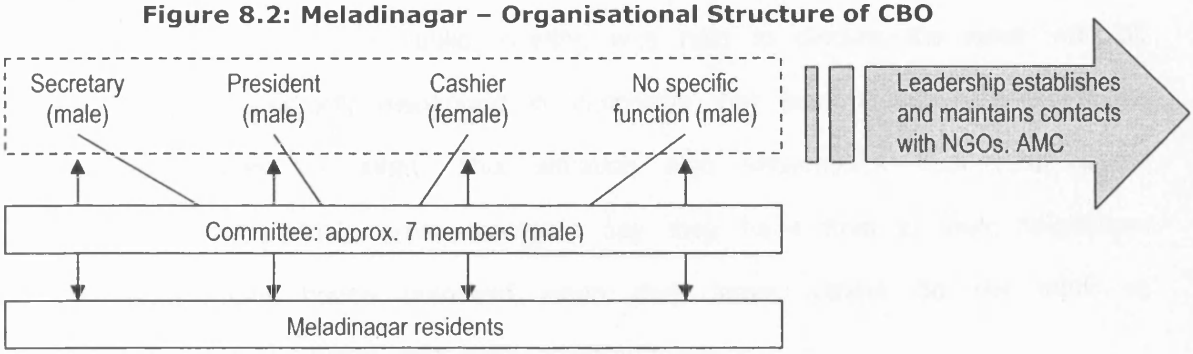


Figure 8.1: Information flows - SNP

It seems the CBO as an institution exists more or less merely on paper but is otherwise dysfunctional. This situation has been repeatedly a cause for conflicts within the community, and surfaces symptomatically with the water issue in the area. While the leadership contends that the CBO is functioning well, voices from the residents suggest a different view. Conflicts between residents and leaders have erupted over the years especially due to the water supply and drainage/sewerage pipelines, which do not affect all residents equally (see Chapter VI). These disagreements indicate the limited communication between residents and the leadership. There have been many discussions among the residents and leaders on this critical issue, accusing each other of inaction. According to many residents, conflicts among the people occur due to the absence of adequate responsiveness of their leaders. Many residents maintained the problems brought before the leaders are

largely ignored and the CBO is ineffective. Additionally, it also seems that the people do not cooperate. As a result it became a practice for many residents to address the president directly whenever possible.

Figure 8.2: Meladinagar – Organisational Structure of CBO



In defence of the leaders it must be noted though that many complaints had been put forward by them regarding the water situation, but the AMC has been incapable or unwilling to resolve it (box 8.1). Such circumstances are a frequent reason for undermining the credibility of community leaders and have been observed in the case of Nitinagar as well. While the people contend that the members of the CBO should have knowledge about the residents' concerns, the current leadership, it

Box 8.1: Meladinagar Case Study – The Drinking Water Issue and Communication

One day during my stay in the area I accompanied a resident to the Ward Office who suffered from the inadequate water supply. Following this, a typical situation developed which demonstrates the conflicts within the community:

One of the women who has a key position in the area due to her employment with an NGO had filed a complaint with the Ward Office a week before, so he wanted to inquire what has been done in the meantime. I went with him to the Ward Office and we met the officer there. The resident brought forward his already well known complaint, and the Ward Officer replied to him to refer to the officer in charge at the tube well station for drinking water in Asarwa Zone [a borough near Meladinagar].

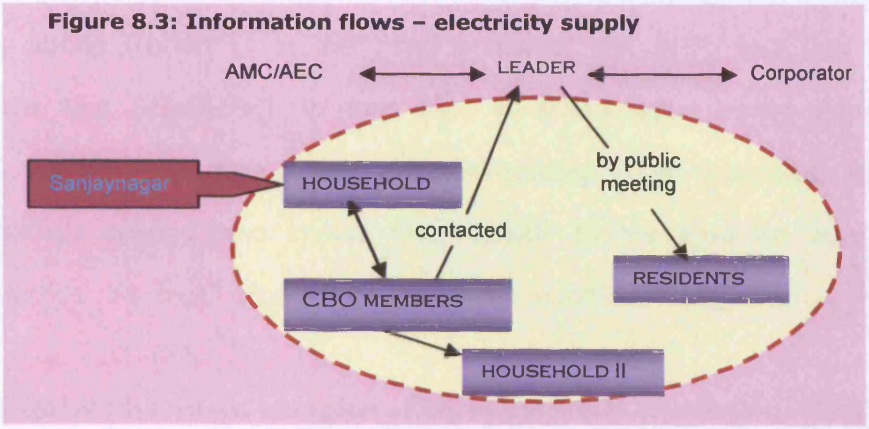
On the way back to Meladinagar he told me that he has been concerned with this issue for the last three years, but none of the leaders had put forward the complaint properly and due to his job duties he was short of time to pursue it regularly. When we met one of the leaders of the CBO, he asked the resident why he had gone without informing the leaders and the other CBO members. He should inform them so that they can all go together. The resident replied that this was an old problem and they had not taken interest in it in, and the leaders did not help the residents. Furthermore, the AMC has now also a reason not to do anything, because people made the water tanks and decreased the level of the taps. This is also a reason of quarrelling among the residents who are affected by this situation. For instance, this resident did not construct a tank and has to ask for water at his neighbour's house.

Nonetheless, this resident is convinced that one day AMC officials will come to the area to see why they made the changes. The dwellers asserted, before they made these changes they have complained to the AMC. Some AMC workers had come and divided the main line into two parts. After that measure they had received regular water supply for some time, but then the situation worsened again. It was since then that they got no response from the AMC any more. This was the time when they stopped filing complaints and began to construct the tanks. Following this, the resident wondered very frustrated: "Is this 'parivartan' (change)?"

appears, finds it difficult to entrench a sense of cooperation among the residents.

Another source of conflicts is the existence of the illicit liquor shop, whose owners attempted to prevent the introduction of legal electricity supply (figure 8.3). In the course of the negotiations, a public meeting was held to discuss the issue with all residents. People repeatedly mentioned in interviews that fear of the dealers inhibits communication within the slum. This situation also undermines trust relationships among the residents. While some residents say they have trust in their neighbours and can leave their house unlocked when they leave, others do not think so because of the liquor traders and their customers.

Figure 8.3: Information flows – electricity supply

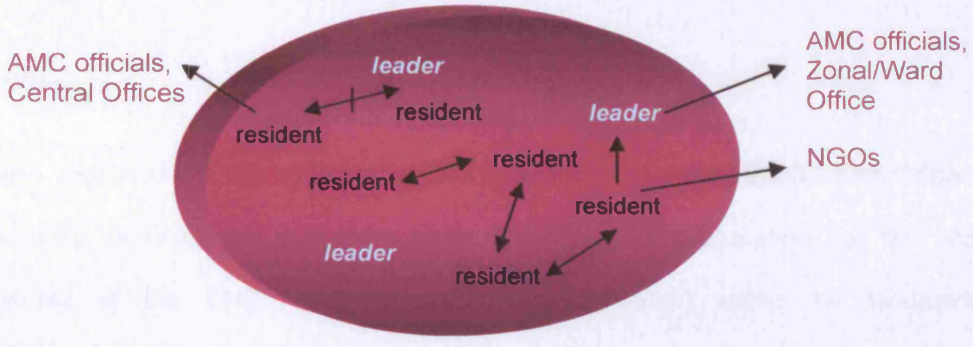


The previous discussion of the CBO and its relation with the community brings to light a discrepancy between the formal hierarchical organisation of the *Meladinagar Samiti* and the actual situation. As residents who have a complaint frequently circumvent the leaders, inconsistent and uncoordinated poly-vocal messages are released by the slum area towards local AMC officials (figure 8.4). By virtue of this, the actual situation suggests that leaders are by and large isolated, since individuals or groups of residents act without always informing them. In some cases leaders speak for the community, but simultaneously individual residents also contact the AMC. Surely, the SNP does not envisage a specific procedure prescribing that interaction and complaints can be brought to notice only by CBO leaders. This

would undermine the efforts of the AMC to improve responsiveness and transparency through its Zonal/Ward Offices for each citizen (see Chapter VII). But for slum dwellers the issue in many cases is that complaints of individuals are frequently neglected. Hence it is more effective for them when they can achieve a common stand on a problem and then speak with one voice.[124]

Clearly, a CBO depends very much on its leaders. In this case one may conclude that the unorganised CBO inhibits external communication. It becomes evident especially towards the AMC Zonal/Ward Office. One reason for this weakness is certainly the fact that apart from the physical improvement of the settlement, the community development components of the SNP remained almost entirely neglected because of the strong leadership in the initial phase of the SNP, and later it was difficult for NGOs like SEWA-MHT to take root in Meladinagar. Hence there is a growing feeling of frustration among the residents leading to an increasing suspicion and mistrust towards anyone who comes from outside to the area for research or development activities, as high expectations have not matched reality.

Figure 8.4: Exemplified actual situation of communicative interaction –CBO and Residents



[124] This issue relates to efforts of NGOs in section 8.2.3.

Owing to the current circumstances, the communicative competence of the residents is framed by the institutional qualities as summarised:

- The CBO was in existence and dynamic before SNP implementation: therefore SEWA-MHT did not intervene much, this resulted in a relative lack of knowledge in institutionalising the CBO;
- It is a male dominated CBO: gender bias is rooted in social norms such as male dominance in public life, respect given to male elders (seniority) and the custom of *laaj*, which make it more difficult for women to enter such organisations;
- Procedures are undemocratic: members are not elected but emerge as 'natural' leaders of the community;
- Functions and roles of leaders and committee members are not defined and clarified;
- Leadership is weak: damaged trust of residents, unwillingness/inability to assist residents;
- The CBO does not hold regular meetings and is largely dysfunctional due to the absence of dynamic leadership;
- The CBO does not conduct any community development activities as envisaged in the SNP concept.[125]

8.1.1.2 Nitinagar

No formally registered CBO had existed in Nitinagar before 2003. Only one year later community development activities were flourishing in preparation for the start of physical works of the SNP. This created a new situation within the leadership of

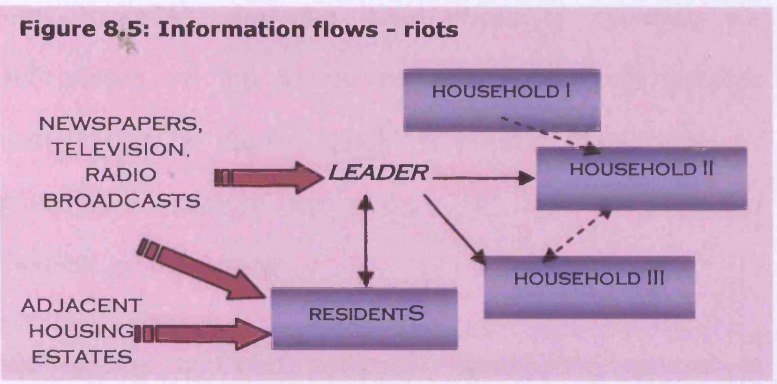
[125] The situation in Meladinagar with a relatively weak CBO is not a singular case but can be found in other SNP-areas as well. Until now the community development for SNP focuses mainly on the preparation and implementation phase, rather than on post-SNP support to enable these newly established CBOs to become more self-reliant and sustainable.

the area, since SEWA-MHT promotes the process of women CBOs. Until then the male leadership had assumed a key role in communication.

Before the implementation of the SNP[126], Nitinagar enjoyed the exclusive leadership of two relatively strong and active personalities. Although residents maintained the leadership comprises in total four leaders only two of them seemed active. The two leaders played significant roles in fostering communication channels for example with regard to the SNP and during the communal violence. Similar to Meladinagar, Nitinagar residents too acquired information about the riots from neighbours, nearby housing societies and the media (figure 8.5). Two factors, however, are responsible for the comparative effectiveness of verbally transmitted news being of much higher relevance in this case. First, access to television or radio is very limited in the area due to less financial resources, but also because the vast majority of residents have no electricity connection. Secondly, high illiteracy also prevents many residents from reading daily newspapers. Figure 8.5 displays the various ways of information flows in which the leaders play a pivotal role due to their access to the media, while most residents have to rely on verbal communication from within and outside the settlement.

Another instance demonstrating the leaders' function as a node in facilitating communication was information about the SNP (figure 8.6). One of

Figure 8.5: Information flows - riots



[126] The SNP was implemented in this area in the year 2004, after the major period of fieldwork was conducted. A revisit in April 2004 already indicated some changes in the leadership structure which are included in the following discussion to illustrate foreseeable shifts in power relations within the community leadership.

the leaders of the area maintains a good personal relationship with the local corporator who told him about the scheme. In order to inform all residents, the leaders convened a meeting with them. Subsequently a group of residents together with the two leaders went to the SNP-Wing. The residents recalled that they got a good response from the head of the department, who advised them to get in touch with SEWA-MHT and also to contact FPI/UPP, which would conduct the area surveys. As the chart illustrates, this process was circular and went through various levels of stakeholders.

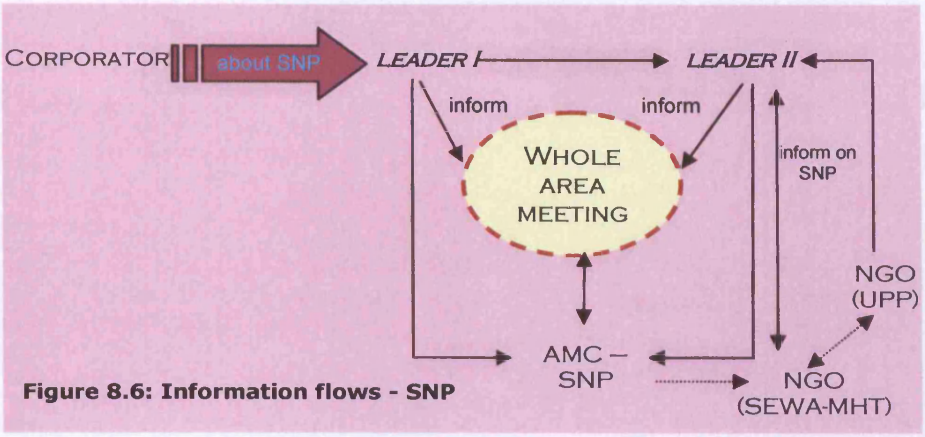


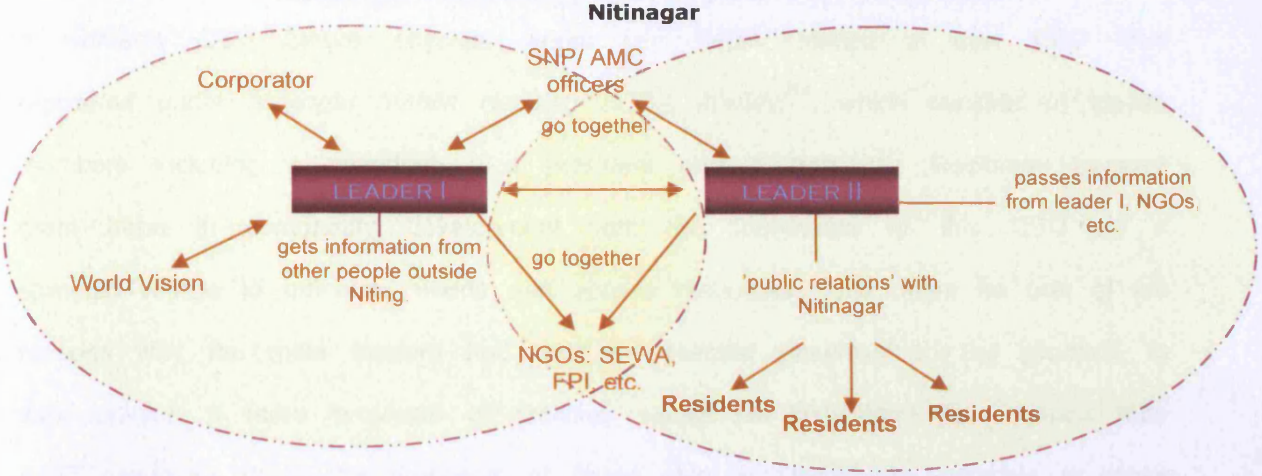
Figure 8.6: Information flows - SNP

It was found that the communicative process regarding information about the SNP was one of the most elaborate. However, after the initial phase of informing the residents about the process and setting up the saving scheme, it was not possible to maintain the communication stream on a regular basis. At present there does not exist an institutionalised communication structure within the SNP that goes beyond the facilitation of the physical works in the slums.

Organisational skills of the two leaders surfaced particularly during the conduct of the participatory workshops. In the course of the workshops both leaders took particular responsibilities. Thus one leader revealed genuine leadership qualities with his benevolence and rhetoric qualities. Based on discussions in these sessions and

interviews with the leaders, it was later possible to ascertain a kind of informal functional division between them. As it turned out, one of the leaders (leader I) made extensive use of his contacts with external sources to acquire information, whereas the other one (leader II) seemed to be more into 'public relations' with the residents, often forwarding information received from his counterpart (figure 8.7).

Figure 8.7: Informal functional division of the two leaders in Nitinagar



However, the leaders are apparently unaware of this pattern, which is one reason why a systematic way of communicating the information received by the leaders does not exist. The channels which are utilised are primarily informal by means of conversations and requests on the demand of individual residents. They do also not hold regular meetings within the community. This situation was corroborated by the residents asserting that they do not have direct personal contacts with the AMC. People complained that when the leaders undertake such activities, they would not discuss the outcome with the residents. In addition, the residents feel sidelined not only by their own leaders, but the practices of NGOs as well. They recalled a large meeting with 200 residents from Nitinagar with SEWA during which the people

were disappointed not to be included in the discussion, as the NGO addressed only the leaders.

When I revisited Nitinagar in March/April 2004 one year after the main fieldwork, I encountered two community organisations. Especially the long awaited start of the implementation of the SNP scheme in Nitinagar had brought about some new dynamics in the institutional set up whose impact however cannot be fully assessed as yet.[127] In order to facilitate participation, SEWA-MHT makes it mandatory to form a women's CBO before physical works can begin. Hence a new CBO was registered under *Nitinagar Mahila Housing SEWA Mandal*[128], which consists of eleven members including a president, vice president and a treasurer. Residents connect great hope in community development with the foundation of this CBO as a strategic vehicle to articulate needs and access resources. This might be one of the reasons why the male leaders had thus far reacted positively to the process. In their opinion a mere provision of facilities would be insufficient to enhance their living conditions. It is the prospects of being able to utilise new contacts to make use of the banking, insurance, and health facilities provided by various SEWA organisations. However encouraging these ambitions are, past experience of community development in the SNP can cause a backlash if such aspirations are not met, as has partly been the case in Meladinagar.

Significantly, in the process SEWA-MHT managed to accommodate the male leaders by involving them in these ongoing activities. Thus through this intervention some initial improvements and changes in information flows have taken place, e.g. frequent public meetings have been organised and the women were encouraged to take

[127] Physical works for the SNP had officially started in December 2003. SEWA-MHT began with drainage works on January 9, 2004.

[128] Besides this SNP related CBO, another micro-credit group called Nitinagar *Devipujak Mahila Bachat Mandal* (Nitinagar Devipujak Women Savings Group) with twenty members was founded in April 2003 with the assistance of World Vision.

leadership roles and make decisions. It remains to be seen though, in which way these activities generate sustainable structures and do shift the power balance within the community.

8.1.2 Space and Place, Diversity and Gendered Communication in the Slums

The type, quality and availability of space and place impact on human interaction and can facilitate or restrain communicative encounters of men and women. In Gujarat, vernacular buildings are characterised by an open front (in Gujarati = *otlo*), which form a communicative space that provides for informal gatherings. Especially in congested slums there is no strict separation of public and private space, in fact the internal roads are more like semi-public spaces (similar to the concept of *pols*[129]) used for a variety of activities, where people have encounters when brushing teeth, making *papad* (a snack), washing laundry, collecting water and so forth. The use of this permeating public-private communicative space was very visible during my visits in the locations. I have introduced these inconspicuous channels of communication in the methodology chapter as 'metacommunicative events', which follow a routine of generating shared knowledge among residents.

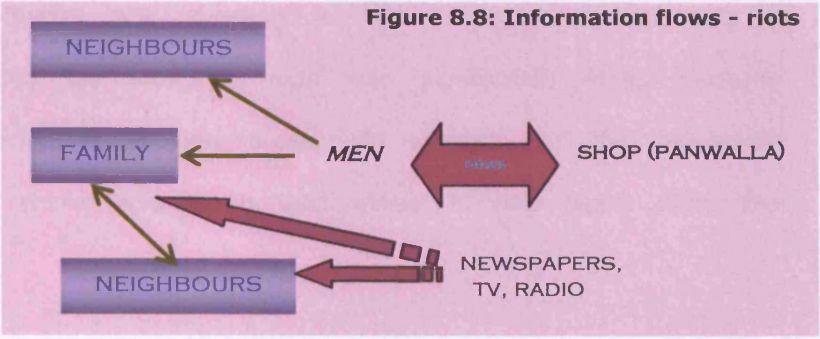
Plenty of spatial interfaces of communication can be found in both slum locations. In Meladinagar women and girls sit together in groups when they do home-based work and meet in large groups in front of an *imli* (tamarind) wholesale trader nearby the area. A resource for external information is the construction workers' meeting point - *kadya naku* - where all workers, male and female, gather in the

[129] The *pol* is the typical spatial feature of the walled city in Ahmedabad. It consists of a group of houses around a road and a yard. Traditionally members of the same caste or occupational group resided in a *pol*, which was self-governed by the elders. The structure of a *pol* is introvert, i.e. it could be closed with a gate (the actual *pol*) in times of social unrest.

mornings. Due to the lack of infrastructure in Nitinagar, public water stands and other water sources facilitate encounters particularly of girls and women. These are both conflictive as well as informative with fellow residents and outsiders. For vegetable vendors the daily markets where they purchase their goods offer opportunities of communication.

A *pan*[130] stall near the entrance to Meladinagar is a popular place for the men to 'hang out' (see map 6.2). It is considered a valuable source for the exchange of news. One participant commented, "whenever we go to the *pan*-house we get the latest news on almost everything. For the men it is a 'kind of sport' to meet there, and the *panwalla* [shopkeeper] is the intermediary who picks up and disseminates messages. When the men come back from these places they tell it their families and neighbours". This shop proved essential especially during the riots (figure 8.8) when the majority of residents did not dare to go to work and therefore influx of reliable information on the conditions in the city was limited.

Figure 8.8: Information flows - riots



As noted by Riley and Wakely (2003), diversity and heterogeneity are inherent dimensions in a group and give reason for unequal participation in community matters and exclusion or marginalisation in communication processes. However, the relatively small size of Nitinagar and Meladinagar - by no means exceptional for Ahmedabad - reduces the degree of heterogeneity in terms of caste belonging, faith

[130] *Pan* is a betel leaf which is filled with betel nut, coconut, herbs, etc. Men chew it especially after a meal or just to enjoy the mild hallucinogenic effect of betel. There is also a sweet *paan* available without the betel nut.

groups, ethnic background, and income levels. In spite of the fact that two castes reside in Meladinagar they are not essentially divisive. In Nitinagar there are even less reasons as the resident groups are considered sub-units. It was also found that relative income differences are largely negligible within both the areas, although in Nitinagar some households are so poor that they cannot afford to pay the required financial contribution for the SNP.

In addition to the spatial gender segregation, mentioned above, socially conditioned gender dimensions also have a significant effect on social networks and communication, especially the gender dimensions and factions that emerged around specific topics such as the water supply in Meladinagar. Also, indicators such as literacy differentials between men and women as well as cultural norms and customs can be made responsible for gendered communication practices. Observations from the workshops suggest literacy level, the confidence to voice one's opinion and speak up within the community are revealing in this respect. For instance, in Meladinagar, the pace during the men's session was significantly faster because nearly all of them could write. In addition, some field workers had the impression that men's confidence to receive information and utilise it was higher than the women's.

In Nitinagar, the contrast in literacy and confidence was even more pronounced with the two leaders assuming a privileged position relative not only to the women but also to most men. The low literacy rate of men in Nitinagar is a noteworthy difference to Meladinagar (see Appendix 5.1, 5.2). The implications of cultural norms such as the *laaj* and social reputation have been highlighted in detail in Chapter VI. Incidents during the workshop in Meladinagar which especially inhibit younger women to voice their opinion in front of elders with an unveiled face symbolised the limits of communication for many women. Besides, the male domain is largely the public

space and the female domain the house/slum area, hence it is much more likely that the men would bridge the gap by being the communicator between the outside world and their women. Although this is often undermined in the slums and in lower classes because the women are needed to contribute to the household income, it is further reinforced by the fact that many women are also illiterate and have to rely on what other people like their female friends and neighbours or their husbands tell them. As a result, they frequently receive highly filtered and already interpreted messages.

8.1.3 Communicative Relationships: Slum Dwellers, AMC Officials and NGOs

The social distance between the slum dwellers and all other actors is a remarkable feature of the communicative relationships. This has serious repercussions on the notions of the stakeholders and qualifies their perceptions and attitudes about themselves and each other (table 8.2). Whereas slum dwellers are frequently migrants and belong to the lowest castes and classes, the majority of both NGO workers and AMC officials come from a middle and upper caste background. AMC officials typically maintain that slum dwellers lack awareness and must therefore be educated on certain subjects relating to their life. This common attitude is reason for regular conflicts. In both case study areas residents expressed a noticeable inferiority complex. They connect their low status, illiteracy, poverty and unemployment to the AMC's attitude not to respond to their complaints. As a consequence, they feel disregarded and neglected by AMC officials. Wakely and Riley (2003: 80) report from similar circumstances in Rio de Janeiro's *favelas*, where residents often felt dismissed or ignored because they were not able to communicate on an equal footing. They are stereotyped as ignorant, uneducated and with little to contribute.

Yet availability and the systematic production, dissemination and utilisation of local knowledge can change relationships of power dominance and control. Community Resource Centres that facilitate the use and access to information and a GIS database of a slum settlement have such a potential.[131] On the basis of this, slum communities and their organisations can be enabled to enter a discourse arena to articulate their demands. The case of the Railways Slum Dwellers Federation (RSDF) in Mumbai, which collected data in a participatory manner about slum dwellers who live along the railway tracks, provides an impressive example. The power of information and knowledge strengthened the communities and helped mobilise them to articulate their situation and consider alternative approaches to changing it. Thereby the conventional order of the control of knowledge was reversed, as government agencies had to revert to the data generated by the community itself to obtain details about the conditions on the ground (Burra 1999: 7-8).

Power games and struggles between NGOs and the AMC are also frequent occurrences. As one professional observer noted, there is often an 'ego-clash' between NGO and AMC staff in SNP project areas. Residents would usually identify with one group, with both the AMC and NGO imposing their ideas for implementation according to their viewpoints. Because it is recognised that there may be expectations of residents which are not met in reality, there is a need to secure communication between residents, NGOs and the AMC to avoid wrong expectations. Nonetheless, various NGO officials emphasised that a large bureaucratic apparatus needs time, space and understanding for innovation. Hence it would be necessary to institutionalise such kinds of partnerships so as to make them a 'normal' and 'accepted' part of AMC structures.

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[131] Urban Planning Partnerships established a Community Resource Centre in Nitinagar in February 2005 (personal communication with Mrs. Chhatrapati, Chief Coordinator, UPP, 23/06/2005). There is none in Meladinagar.

Table 8.2: Stereotypes and Notions of the 'Self' and the 'Other'

about... \ Perceptions of...	AMC Officials	Slum Dwellers	NGOs
AMC (Officials)	⇒ insufficient capacities for SNP community development (staff, training) ⇒ AMC procedures logical for insiders and justified, but may appear diffuse & inefficient to outsiders ⇒ frequent changes in leadership cause discontinuity of programmes: more commitment needed ⇒ no time and perception within AMC to associate with NGOs and integrate new topics like urban risk reduction ⇒ corporators may be counter-productive when it comes to policy decisions ⇒ decisions made only on top level, no culture of critical thinking & discussion ⇒ inefficiency in filling vacancies	⇒ AMC tries to resolve problems, but is incapable: residents need unity to be heard ⇒ people feel harassed by AMC ⇒ AMC does not listen to people ⇒ "we are neglected due to illiteracy and our poverty" ⇒ people are disappointed with AMC's non-action ⇒ administration is corrupt	⇒ AMC is very forthcoming ⇒ learning process: 'slum awareness' develops slowly in SNP-wing ⇒ AMC has ownership of SNP since phase II ⇒ corruptive officials ⇒ AMC politically interlocked: decisions are blocked frequently ⇒ no information-sharing ⇒ bureaucratic apparatus work culture: innovation has to come from outside ⇒ interaction limited due to lacking networks: less educated corporators find it difficult to interact with middle classes, universities, research institutions, etc.
Slum Dwellers	⇒ "their mind must be treated" ⇒ "their mind must be changed" ⇒ lack of awareness & education in slums, because people belong to labour class: undisciplined use of services, no maintenance	⇒ inferiority complex prevalent ⇒ neglected and disregarded by others including NGOs ⇒ Nitinagar: gain self-esteem from *Svadhyaya*, have hope ⇒ Meladinagar: "we are literate, but feel ashamed because we are unsuccessful in employment", high frustration	⇒ poor people not prepared to interact with organised institutions like the middle class, AMC, educational institutions, funding agencies ⇒ slum dwellers are willing to pay for services ⇒ slum dwellers have significant local knowledge
NGOs	⇒ people trust NGOs ⇒ NGOs mobilise slum residents and give them trust ⇒ sector specific NGOs in Ahmedabad: very few NGOs capable to work with holistic approach of SNP ⇒ NGOs very diverse: follow very different approaches (AMC has to adjust to each) ⇒ "it is the duty of NGOs to look after community development due to the AMC's limited staff"	⇒ ambivalent opinions about NGOs ⇒ some do not keep their promises, deception ⇒ source to obtain information ⇒ assistance to organisation building	⇒ process oriented work culture ⇒ SEWA-MHT bridging link between AMC and other stakeholders ⇒ donor attitude: many NGOs reluctant to take a financial contribution from slum dwellers ⇒ NGOs have to learn how to deal with AMC

The relationship between NGOs and slum dwellers is not power neutral either, but at times characterised by a kind of patronage. Patron-client relationships are a very old part of Indian culture. One informant pointed out that NGOs would keep the CBOs in a similar position, for they are unwittingly conceived as clients by most NGOs, which unwillingly reproduce a patron-client relationship. This reflects a contradiction of the NGOs whose very aim is to empower the communities, but at the same time would not let them 'grow up' to become independent or autonomous. As long as this does not happen, CBOs and slum residents would never be able to deal completely on their own with the AMC or other agents. This is however, a very controversial opinion. Contrasting to this, SAATH's experience is that in order to keep CBOs functioning funds are always necessary from outside. While no organisation would be totally independent, CBOs can learn to raise their own funds. Clearly, this is a double-edged topic. Using evidence from Ahmedabad, Devas (2000: 32) stresses that CBOs face many problems, especially limited resources of time, energy and money. Also, they often lack skills to effectively negotiate with city authorities and hence need NGOs to assist them.

Apart from this, evidence shows that conflicts among NGOs themselves to exert influence over slum areas impact negatively upon slum communities. Such instances result in undermining the credibility of both the leadership and residents who question the reputation of the NGOs involved. For example, before the implementation of the SNP, the leaders of Nitinagar had a meeting with the Ahmedabad Electricity Corporation during which AEC officials promised to begin works about two weeks later. This information was passed on by the leaders to the residents. The project was supposed to be financially supported by World Vision. Yet at this point SEWA-MHT had opposed this effort arguing there have already been activities in the area by them which were linked to the SNP and negotiations with the AEC. However, the financial support was not included in SEWA's offer, and the

residents wondered why they could not opt for World Vision. One leader reported how these circumstances disrupted the relation between him and the residents, putting the leaders in a difficult position to negotiate the matter. Residents consequently lost trust in them and the SNP equally, including SEWA-MHT. Disputes among NGOs over project areas and activities in SNP-slum settlements have inhibited communication processes considerably as they impact upon the trustworthiness of the actors.

As underlined, the SNP is propagated as a partnership programme and in this function it presumably provides an institutional environment for communication. However, ever since its inception the conditions and set-up of these stakeholder relationships have undergone various changes that have ramifications for the communication between the partners. Hitherto three phases can be identified that characterise the trajectory of the programme, the Pilot Phase of Enthusiasm, a Phase of Sobriety, and lately a Phase of Redirection (table 8.3). In general, based on continuously gained experience a process of constantly formalising the institutionalisation of the partnership structure over the years is conceivable. The partnership has been positively utilised particularly by NGOs to concentrate and combine other poverty and risk reduction activities. It has also been able to bring together very different stakeholders, even though not on equal terms.

Particularly the latest developments of the partnership in the 'Phase of Redirection' have triggered many critical comments. Having noticed that contractors are not easy to control, to work reliably and be trustworthy, and on account of the strong builders-politician nexus, the AMC decided to 'outsource' the management and implementation of physical works to the NGO partners which were thereby turned into quasi-contractors. This new role allows the AMC to withdraw further from direct involvement with implementation, and just be responsible for supervision. As a

consequence, the AMC became a kind of 'sleeping partner' in the programme who provides the funds but does not show any intention to be seriously involved beyond that.

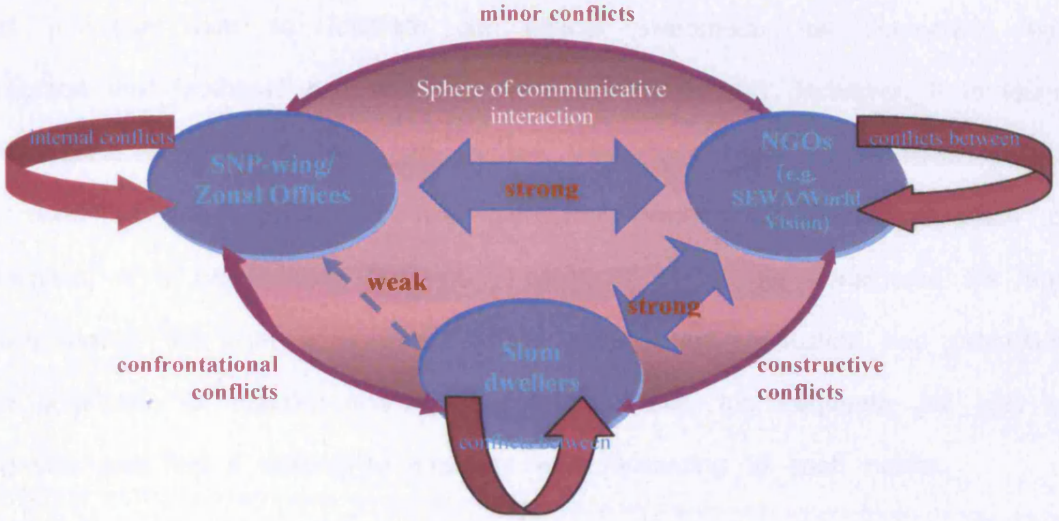
While SEWA-MHT maintains it is their opportunity to control corruption and keep the implementation process in hands of a single organisation, one professional remarked SEWA-MHT got co-opted by the AMC. The newly defined functions keep the AMC/SNP-Cell comfortably at distance from what happens on the ground, since it is not directly involved with the community any longer. Other professionals argue that despite its shortcomings the AMC would have done better than NGOs in fulfilling the physical part in the SNP. The SNP should have rather built on the AMC's 200 years of experience in infrastructure provision to its citizens. Besides, the Corporation has a legal liability according to the BPMC Act to provide infrastructure to all its citizens as a matter of public health. Thus this decision leaves behind a great deal of symbolic impact, also in the way the partnership is handled. Because as a result of these changes, the slums are once more limited out of the mainstream city development and the direct responsibility of the AMC, thus the "SNP has inherited the bias to the [slum] population", as an expert put it. In other words, social exclusion and neglect by the authorities is now been manifested in the institutional structure of the SNP. The outsourcing of service provision equals the outsourcing of the responsibility towards the poor and marginalised citizens who are now not included in the city's system any more.

Table 8.3: The Dynamics of Partnership Relations between Stakeholders in the Course of the SNP (source: author's compilations)

	Stakeholders	Nature of relationship (roles, contribution)	Causes for change	Impacts / lessons learnt
1996-97 Pilot Phase of Enthusiasm	▪ AMC ▪ Arvind Mills (SHARDA Trust) ▪ NGO: SAATH ▪ SEWA Bank ▪ Sanjaynagar slum dwellers ▪ H. Parikh (engineer who designed SNP)	▪ Ideally designed to collaborate on equal terms as partners for Slum upgrading ▪ AMC: financial resources ▪ Arvind Mill: infrastructure implementation ▪ NGOs: community development ▪ Slum dwellers: financial contribution, CBO to maintain infrastructure ▪ SEWA Bank: loans for slum dwellers ▪ H. Parikh: principle consultant	▪ Coordination influenced by different work cultures: disagreements between actors ▪ Arvind Mill short-term oriented and concerned with outcome rather than method ▪ AMC no defined role but financier: degraded to role as 'bystander' ▪ SAATH did not inform sufficiently about its activities	▪ Arvind Mill drops out ▪ Reshuffle of roles of partners: AMC takes over role of Arvind Mill ▪ Lesson learnt: long-term perspective inevitable, private sector difficult partner when more involved than just providing financial resources
1997-2003 Phase of Sobriety	▪ AMC ▪ SAATH ▪ SEWA Bank ▪ SEWA MHT ▪ Slum dwellers ▪ Private sector	▪ AMC takes the lead role: now responsible for budget and infrastructure implementation through contractors from private sectors ▪ Private sector: negligible financial contribution ▪ SEWA-MHT, SAATH: community development ▪ SEWA-MHT emerges as the dominant NGO to take on SNP ▪ SEWA-MHT able to form a close relationship to AMC officials ▪ SEWA-MHT builds a partnership with Ahmedabad Electricity Corporation ▪ Slum dwellers: payment of their contributions far below expectations	▪ very slow progress: AMC does not have capacities to implement a programme with such a scope alone, political commitment changes from time to time ▪ Resources and capacities of AMC are limited, especially regarding community development ▪ Degradation of quality of provided infrastructure services ▪ up-scaling remains biggest challenge: NGOs as partners are difficult to find ▪ corruption and unreliable private sector contractors ▪ New ideas of institutionalisation: Special Purpose Vehicle	▪ Building successful partnerships is time consuming ▪ Frustration among slum dwellers whose area is on a waiting list for SNP ▪ NGOs carry out 'instant' community development in most areas (founding of CBOs) ▪ Sustainability of community development often not guaranteed due to limited capacities ▪ SNP can be utilised as a multiplier to introduce new topics: urban risk reduction, *Shahbhagi Yojna* ▪ SNP enables new partnerships and networking opportunities ▪ Little mutual understanding of activities between the stakeholders
2003 Phase of Redirection	▪ External actors attempt to enter/influence the partnership: World Bank, other NGOs (e.g. World Vision) ▪ AMC ▪ SAATH ▪ SEWA Bank ▪ SEWA-MHT ▪ Slum dwellers ▪ (Private sector)	▪ AMC increasingly withdraws from implementation: budget allocation, supervision and final check of infrastructure implementation ▪ staff reduced in SNP-cell, even more vacancies and double responsibilities ▪ SEWA-MHT takes over task as a quasi-contractor to carry out implementation of infrastructure besides its role in community development ▪ original stakeholders fear undermining of SNP philosophy by other NGOs	▪ prospective Special Purpose Vehicle (SPV): pushed by outsiders (World Bank, UNDP-WSP) as condition for loan ▪ but scepticism by SEWA-MHT, AMC that long-established relationships might get upset through new stakeholders as demanded by WB ▪ SPV as such viewed as more flexible and autonomous from AMC bureaucracy	▪ SEWA-MHT dominates SNP, entry for other NGOs difficult ▪ SEWA-MHT assumes role of major actor, has exceptional access to AMC, but tendency to be co-opted ▪ Competition between NGOs with different approaches to slum upgrading ▪ Establishment of SPV lingers over the SNP, but its realisation uncertain ▪ Lessons learnt: AMC bureaucracy has to be minimised through a more independent body, the SPV

Concluding this discussion, the communicative reality of the three main stakeholder groups may be grossly simplified as illustrated in figure 8.9. The 'sphere of communication' constitutes communicative links between the actors (blue arrows) and the conflicts within and between them. Similar to a magnetic field, this sphere is characterised by the area of tension (*Spannungsfeld*) between established links (strong and weak) of communication and conflicts. Accordingly, effectiveness of communication depends on the balance between these two dimensions, on how constructive arising conflicts are used to learn and improve relationships and the outcome of development action. This balance can be sustained, managed and qualified by the components introduced by the conceptual framework.

Figure 8.9: Overview of the communicative landscape of the three main stakeholder groups in the SNP



Links between slum dwellers and NGOs are relatively stronger than those with AMC, with a high willingness and commitment to resolve conflicts in a more constructive manner. In contrast, direct interaction between slum dwellers and the AMC offices is often based on deeply conflictive issues simultaneously accompanied by weak and sporadic communication. Contacts or interaction often intensify only when conflicts

occur. The relationship between the NGOs involved in the SNP and the AMC's SNP-Wing is relatively strong, with SEWA having considerable influence and outreach into the urban administration. Conflicts that occur are minor in the sense that this NGO has a good position to negotiate, whereas other NGOs like SAATH try to implement their own agenda without getting too much involved with the AMC. However, conflicts also occur within these three main stakeholder groups. As they are far from homogeneous, disputes and discrepancies over procedures and priorities occur, which often do not leave other actors untouched.

8.2 Justice and Fairness

As noted in the conceptual framework, fairness and justice are inevitable normative criteria to enable inclusive multi-stakeholder communication processes. The six identified principles aim to facilitate an ethical awareness for democratic risk communication that facilitates just and fair processes (table 8.4). However, it is found that this aspect is generally not part of the interactive reality in Ahmedabad. As virtually none of the stakeholders has genuinely internalised ethical principles of communication, it is unsurprising that many practices cannot be considered fair and just. Even though the agenda of many NGOs implies the application and promotion of these principles, for internal and external reasons they too frequently fall prey to power games and find it difficult to explicitly work according to such norms.

8.2.1 Communicative Embeddedness of Slum Dwellers

Informality characterises the channels of communication throughout the study. As outlined in the conceptual framework, social networks can be considered a form of social capital and are pivotal to communicate knowledge, information and the presentation of interests (Riley and Wakely 2003, Ruskulis 2002, Madrid 2002).

Social ties and networks can thus generate community. Being able to act within networks supports the articulation of risks, since the need for assistance requires the communication of the topic at issue. Informal social institutions can be decisive for risk communication, for social networks help the urban poor to manage risks.

An interesting case in point is the *Svadhyaya* movement. The manner in which it reaches the residents of Nitinagar reveals already one of its typical features, namely connecting people and building relationships (figure 8.10). Initially residents obtained information about *Svadhyaya* activities from other areas in the vicinity. In particular one of the leaders took an interest and spread the news within the community. The people emphasised that this triggered discussions between them about the movement's message and their own life.

Figure 8.10: Information flows - Svadhyaya

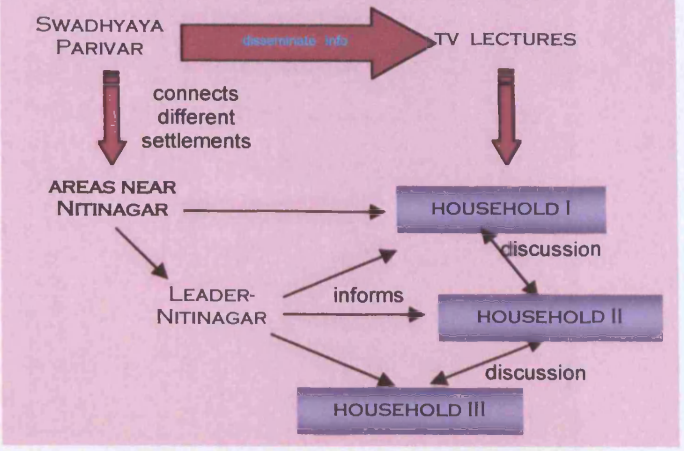


Table 8.4: The Four Twin Concepts and their Impact/Constraints on Communication – Justice and Fairness

Concepts	Constituting Principles	AMC	Slum Dwellers	NGOs	Impact/ Constraints
Justice & Fairness	➲ Democratic principles ➲ Discourse ethics (interests, intentions, goals) ➲ Enabling inclusive argumentation ➲ Participation in decision-making ➲ Access to information ➲ Distributive fairness	Democratic Principles ▪ Local self-government constitutionally secured ▪ Administrative decentralisation, but ward committees not established Discourse Ethics ▪ The AMC uses a lot of rhetoric without willingness or capability to implement ▪ Knowledge of slum dwellers usually not considered Inclusive argumentation ▪ No genuine culture of discussion within the administration ▪ Politics often prevent inclusion of the poor Participation in decision-making ▪ internally top-down decision making ▪ low/mid-level officers not involved Access to information ▪ no information sharing strategy ▪ partly through e-governance Distributive Fairness ▪ who shouts loudest has best chances to be heard	Democratic Principles ▪ Melading. CBO undemocratic ▪ Male dominated leadership and community organisations ▪ NGOs induce democratic principles and raise women's influence Discourse ethics ▪ Open debates within communities inhibited due to fear and distrust Inclusive argumentation ▪ Code of conduct in one slum outstanding example to enable inclusiveness Participation in decision-making ▪ gender equity promoted through NGO initiated CBOs ▪ not involved in policy decisions by AMC nor NGOs Access to information ▪ Women disadvantaged due to high literacy	Discourse ethics ▪ Support win-win situations between conflicting parties ▪ Mediate, facilitate and negotiate on behalf of the poor ▪ Disruptions due to competition among NGOs Inclusive argumentation ▪ support equity of sexes, gender, caste, ethnicity, religions Participation in decision-making ▪ mobilise and enable slum communities to take part in decision-making Access to information ▪ DMI and FPI/UPP concentrate on access and distribution of information Distributive fairness ▪ Resource allocation for poor citizens on NGO agendas ▪ Capacity building for slum communities to acquire resources	SNP builds on philosophy of equal partnerships No systematic communication strategy for urban partnerships developed No normative framework for urban partnerships NGOs also fall prey to their own interests, infighting and competition SNP and other programmes have potential in mitigating geographical division of risks between east and west Ahmedabad None of the stakeholders has internalised ethical principles of interaction

However, a better institutionalised embeddedness, i.e. connectivity, with other external agents may improve access to information. As indicated in Chapter VI, the communities have a localised understanding of how to relate their perceived risks to known or assumed causes, whereas a broader picture of a city-wide perspective is in only limited reach to them. This relates to the issue of access to other types of information that generate awareness for alternative perspectives and also how to relate local conditions to other parts of the city. Access to further information is central in this respect. Networking or regular exchange of experience does not happen even with nearby slum areas even though single communicative events have proved to be an important source of innovation and useful information. NGO workers have pointed out in interviews that city-wide inter-linking of CBOs and slum communities is an objective for the future, and recently experiments have been started by SAATH and SEWA-MHT.

Nitinagar is much less embedded in such information sharing networks as their contacts with NGOs are still in the formative phase. Nonetheless, one of the most valuable assets in Nitinagar is the leadership. For this reason information networks are characterised by informal knowledge transfers through key individuals such as the corporator, contact with an NGO in an adjacent area, and so forth. Like Meladinagar, the importance of contacts with other slum settlements or neighbouring housing societies to exchange useful information cannot be underestimated. For instance, Nitinagar seems to get only few publications from NGOs as most are only distributed in SNP-areas. One leader in Nitinagar complained that it would be advantageous for them to get such information as well. Meladinagar seems therefore comparatively better integrated in networks with NGOs and contacts with the AMC through the SNP. Hence access to information on various issues including risks is more frequently made available from NGOs, invitations to attend meetings are sent

to the leaders, and even the selection to take part in the urban risk reduction project is due to existing contacts between DMI, FPI and SEWA-MHT with the residents.

Table 8.5: Summarised Conditions of Communication in the two Case Study Areas

impact	Meladinagar (SNP area)	Nitinagar (non-SNP area)	impact
+	*pan* shop	snack & sweets shop	+
+	homebased labour (mostly women) enables exchange of information	homebased labour (including many men) enables exchange of information	+
+	internal roads (semi-public,	encourage interaction various activities)	+
+	established links with NGOs & the AMC (leaders receive information and invitations to meetings)	links to NGOs & the AMC in phase of formation (for SNP implementation)	+
+	despite inferiority complex, residents display a general confidence	*Svadhyaya* potentially enhances communicative ability of residents & raises self-esteem	+
–	weak CBO & ineffective leadership (male dominated)	no CBO but dynamic male leadership	+/-
–	conflicts over drinking water supply (almost half the households affected)	conflicts over drinking water supply & other infrastructure related issues (entire area affected)	–
–	lack of a community meeting space	or hall for social occasions	–
–	frustration among residents increases, and with it suspicion towards NGOs, researchers and other outsiders	mistrust towards outsiders and NGOs	–
–	gendered communicative women show respect towards elders(*laaj*), women lack confidence to speak up,	interaction among residents: illiteracy higher among women, men dominate community life	–
+	some women are engaged in NGO work	life is strongly influenced by faith in the power of goddesses	/

+ facilitates communication - inhibits communication +/- ambivalence / no judgement

Despite such achievements, when it comes to a systematic and strategic use of incoming information, the overall conditions in the two locations suggest that the communicative structures within the slums are not very strong (table 8.5). Thus institutionalised channels of information are not well developed. Also the flows from leaders to residents and vice versa are not guaranteed, in either Meladinagar with its CBO, or in Nitinagar with its self-organised leadership. Henceforth, incoming

information is likely to either get stuck at the top level (leadership) either being disseminated arbitrarily among other households, or bypassing leaders completely.[132]

The difference in perception between the leaders and the residents about the workings and functioning of community leadership and organisations is striking in both slum areas. Often the leaders seem to have a vague understanding of the needs and perceptions of their neighbours. In Nitinagar though, the leaders appeared to be more aware about their fragile reputation in the area and its causes than those in Meladinagar. Overall, despite Meladinagar's better embeddedness, the community development virtually came to a halt on account of the dysfunction of the CBO. By contrast, although Nitinagar is less networked than Meladinagar, it appears much more dynamic at present.

8.2.2 Communicative Competence of the AMC

A look at the AMC's activities to reach out to and stay in touch with the people reveals a wide range of different methods used and actors involved (table 8.6). There is an obvious effort to communicate specific topics using conventional means such as advertisements, the production of pamphlets and publications with information about departments and their subjects. An attempt is also made to experiment with information technology by introducing e-governance and Civic City Centres in the five administrative zones, which are supposed to allow an improved and easier access to the Corporation and its activities. The Publicity Department co-ordinates many communicative activities of the AMC. It is there that topic-specific information is

[132] But in Nitinagar an expansion of the networks and a communicative infrastructure (CRC) through the implementation of the SNP is visible. The question though can not be answered as yet as to how the residents will be able to utilise this opportunity to expand their 'spaces of negotiation' (Smith 2003) and to enter risk debates.

bundled from various departments to be prepared and released to the public. This department is more than 50 years old.

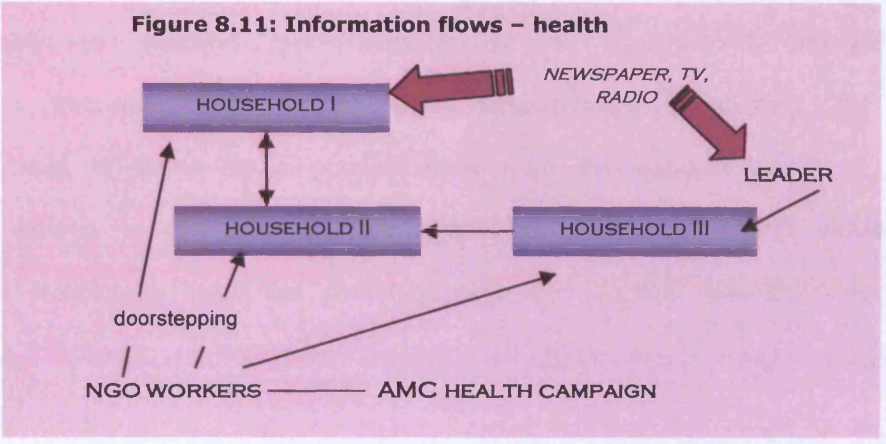
Table 8.6 : Communication Activities of the AMC

Sr. No	Medium of Communication	Content	Agent (departments, zonal office, etc.)	Outcome/Impact
1	public meetings: directly, personally, orally	complaints, on-site visits for SNP implementation	field-level officers (inspectors), in some cases higher officers from both Central and Zonal offices	for SNP pro-poor crucial to build rapport and trust between slum residents and the AMC not strategic approach of communication
2	advertisements in local newspapers	seasonal information on health: use of water, mosquitoes/malaria	specific Departments through Publicity Department	difficult to assess impact, but advertisements in local language Gujarati
3	formal way: administrative procedures (written, personally)	all legal inquiries, complaints (sanitation, building permissions, etc.), application for SNP	Departments and Zonal Offices, MC, Dy MCs	lengthy procedures frequent delays often not transparent, but improvements visible
4	e-governance: Civic City Centres or from home	all legal inquiries (birth, death, etc.) complaints (sanitation, building permissions, etc.)	Departments and Zonal Offices	recent initiative to be closer to the citizens only for formal procedures, therefore not pro-poor
5	pamphlets (*Nagarik Adhikar Patra* = Urban Authority Newsletter)	departmental programmes and information on departmental duties and functions	specific Departments distribute information through Publicity Department	accessible to everyone who is literate, as in local language Gujarati yet not actively distributed
6	publication	AMC yearly diary: political & administrative organisation of AMC, functions of Zonal Offices, Departments, contacts	Publicity Department	very useful as it gives updated information in local language difficult to assess impact, not actively distributed
7	press conferences	all matters of the Corporation	MC, Dy MCs, politicians	wide distribution to local and regional media
8	a) general public campaigns	awareness generation: yearly 'fire day', tree plantation in monsoon, etc.	Fire Brigade, other Departments	annual one-off activities, but not incorporated in a communication strategy
	b) public campaigns in slums	pamphlets distributed in slums by NGO workers (polio campaigns, etc.)	Health Department and others	pro-poor orientation classic approach of development communication to educate people
9	face-to-face community development	in slum settlements: family/household planning, child care (kindergartens), health awareness	UCD social workers	pro-poor orientation low and insufficient impact, understaffed & unimportant department, multiplication effect limited

The Corporation launches various awareness and other campaigns for which it publishes pamphlets in Gujarati (for example about polio) to be distributed in the slums. Because of the scale of such mass campaigns the AMC seeks assistance from NGOs. Social workers visit the slums for doorstep campaigning to reach the many illiterate people. Meladinagar residents reported they receive health information by way of two different means (figure 8.11). One is the classical mass media communication approach to educate 'the public' through newspapers, TV and radio. This information is passed by word of mouth among the residents, sometimes also through a leader as the interface to inform illiterate neighbours. Another way people acquire health knowledge is through extended doorstep campaigning.

Despite the relatively wide range of communicative activities of the AMC, the question remains whether they are inclusive and suitable to address the concerns of the marginalised and poor sections of the citizenship. In many cases the processes and means are obviously not accessible or useful for slum dwellers, who are largely excluded because they usually move within the informal sector where many services are not available for them. In addition, many publications are not actively distributed but are only available on request; one has to know that they exist. Difficulties arise already with material in written form, which particularly discriminates against women, let alone access to the internet that is necessary to take part in e-governance.

Figure 8.11: Information flows – health



VIII. Communicating Urban Risks

Apart from the fact that most residents do not know how to handle a computer, the e-governance initiative is exclusively concerned with formal procedures ranging from birth/death certificates and taxes to building construction permits, thereby excluding slum dwellers from most of these benefits.

It is not that the AMC does not recognise these facts. As we have seen, campaigns are organised together with NGOs to inform people at the doorstep. After all, AMC officials in the Public Health Department are aware that inter-personal and verbal communication is almost the only way to reach the slum dwellers. Yet as illustrated in table 8.6, this type of interaction is widely underrepresented. The UCD Department and also SNP-Wing do not have the priorities and capacities to carry out such activities to achieve a city-wide impact. Additionally there are clear shortcomings with endeavours of such campaigns as they are not participatory and reflective but one-directional and only undertaken periodically. This is one of the most critical aspects in communication, for it is the AMC that aims to inform, using and imposing its knowledge and methods. A continuous dialogue with the citizens in the slums in order to identify their needs and demands to clarify issues of concern and negotiate them is not envisaged.

Thus, there are not many ways for citizens to communicate collectively with the local government. Every year there are some 15-20 rallies at the AMC offices in which issues like water scarcity and other recurring failures are aired. Due to the AMC's inability to respond and engage in a constructive dialogue, such demonstrations frequently turn violent with demonstrators ransacking the offices. Interestingly, most of these vocal people come from the eastern wards of the city and do not belong to the well educated population who live in the western part. These events indicate a need for communication and conflict resolution mechanisms

especially between the poorer sections and the AMC that are currently not in place or only irregularly used.

There exists a compelling example of conflict resolution deployed by the AMC to settle disputes over property taxes and building construction with owners who felt mistreated. In response to this the AMC arranges *lok adaalats* (also *lok darbar*), a people's court, which is an ancient institution of conflict resolution and now used as a redress system at zonal level (AMC 2003: 88, AMC 2005: 123). As figure 8.12[133] illustrates, ideally this method is a sort of last resort for an extra-judicial settlement of a growing conflict after a number of failed attempts. In this model of conflict resolution mechanism, interaction between citizens and the AMC goes through three stages before a *lok adaalat* is called. Accordingly, the Corporators of a ward and/or ward officers of the AMC represent the grassroot level, at an intermediate level are the Zonal Offices and Deputy Municipal Commissioners, and at the top an audience with the Municipal Commissioner is possible. If the grievances could not be resolved by then, the Corporation can resort to forming a *lok adaalat*.

In summoning a *lok adaalat*, which is attended by the citizens and representatives of the authority, a solution is sought on the spot together with the support of an expert committee. According to the Public Relations Officer, AMC, such a *lok adaalat* is convened at least once in a year. Even if it sounds as if this institution is a common practice deployed by the AMC, in practice *lok adaalats* are formed in an *ad-hoc* manner and are far from being a regular event. In fact NGO workers and other professionals expressed a lot of scepticism as to its application.[134]

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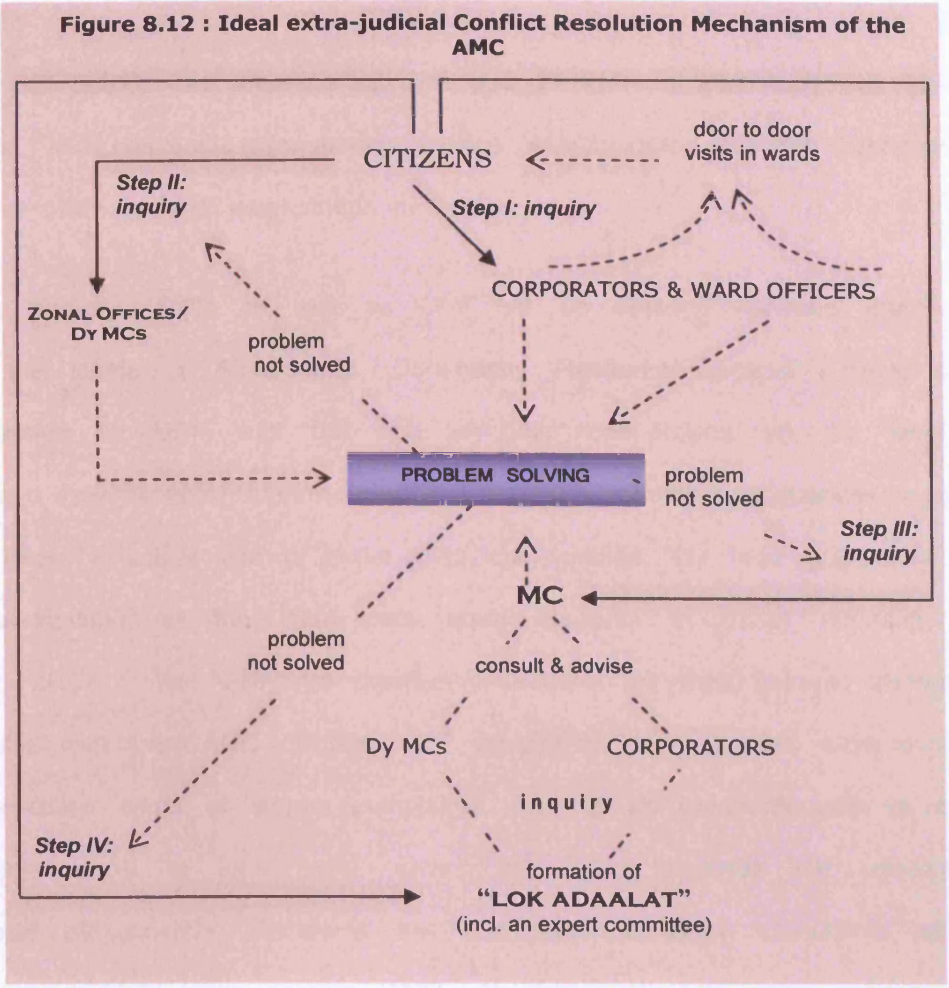
[133] This information is based on interview with the Assistant PRO, AMC, 04/02/2003.

[134] The institution of *lok adaalat* has been largely confined to settling financial disputes between the AMC and its citizens. The AMC claims that since the introduction of a new property tax system such complaints have significantly decreased. Hence it appears *lok adaalats* are utilised in a very narrow sense and its potential for dialogue and negotiated settlement is not recognised.

Figure 8.12 : Ideal extra-judicial Conflict Resolution Mechanism of the AMC



8.2.3 NGO Endeavours for Inclusive Communication[135]

In facilitating efforts of just and fair processes, NGOs can play a pivotal role. The work of two NGOs assumes prominence in this respect. The All India Disaster Mitigation Institute (AIDMI) and Foundation for Public Interest/Urban Planning Partnerships (FPI/UPP) are affiliated organisations that work on the interface of urban risks and development. While the Disaster Mitigation Institute[136] focuses on

[135] This section draws primarily from an unpublished evaluation report on the CRCs and CLCs (Woiwode 2004).

[136] More information on DMI can be obtained from the website www.southasiadisasters.net.

preparedness, impacts of and response to disaster risks, one of FPI/UPP's objectives is to facilitate urban governance through partnerships especially for the ongoing SNP (DMI 2006, FPI 2002). The interface of DMI and FPI/UPP is their common interest in information and communication among various stakeholders and the improvement of stakeholder alliances and partnerships in urban areas.

Serving this purpose, UPP as well as DMI set up demand oriented community centres in the slums of Ahmedabad. Community Resource Centres (CRCs) have been established by UPP with the aim to build connections on the level of community and governmental organisations by making information accessible to slum dwellers.[137] These initiatives aim to make slum communities, city level authorities and organisations working for the local poor equal partners in urban planning and development. CRCs foster AMC-slum dwellers interaction, as they help to strengthen the relationship with local AMC officials. UPP developed forms to help slum dwellers to apply for ration cards or submit complaints. This is an important step to make residents more vocal at local level, saves time and improves the relationship between these stakeholders. Residents are now able to lodge complaints without outside assistance and can contact AMC on their own to solve infrastructure problems. In some cases the CRC representative was able to develop a strong inter-personal relationship with AMC officials, which helps resolving problems faster.

Community Learning Centres (CLCs) have been established to reconcile conflicting communities, with DMI assuming the role of facilitating learning for peace and protection. Since they are a product of the 2002 riots, CLCs are found exclusively

[137] At the time of research seven CRCs existed in Sinheswarinagar, Ashapurinagar, Shaktinagar, Jayshaktinagar, J.P. ni Chali, Kali Talavadi na Chapra and Nitinagar.

in riot affected areas in Ahmedabad.[138] Similarly to CRCs, they are entirely based on the demand of the residents in slums. As a result of DMI initiatives in the slums, the people desired centres that cut across communal divisions of Hindus and Muslims. For this reason DMI staff stressed that CLCs are not DMI centres, but are fully borne by the people who run the centres as volunteers. Eventually, it is a 'vision' the people have, which may be more important than infrastructure provided by donations. Hence CLCs motivate the residents to change, as many activities initiated by the people demonstrate.

For instance, the success of community based risk reduction capacity building efforts by DMI came to the fore during flooding of one slum location in 2003 when the residents demonstrated their ability to conduct their own assessment of damages. By being supported to organise their own activities in CLCs, residents are enabled to identify the types of risks faced and how to tackle them. The women respondents in Danilimda maintain funds that as a priority are to be used for disaster risk mitigation. Two examples given by them underline the livelihood oriented micro-perspective of people's disaster risk perception which is closely linked to daily life. In one case a person fell ill and as a result had no money to buy food items. He could obtain financial assistance from the fund. In another case a woman with two children got a sewing machine on rent to provide for her family. The women made clear that they define risk according to the circumstances and the context. With the institution of CLCs, residents have developed the capacity to organise their own relief funds and decide what circumstances are high risk and disastrous. This livelihood approach of risk perception is also well reflected in the findings of the two selected case studies.

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[138] As of 2004 three CLCs were founded with locations in Danilimda, Saraspur, and Vatva. The population in Danilimda comprises 50% Muslims and 50% Hindus, whereas in Saraspur and Vatva Muslims are predominant.

A noteworthy endeavour of the Danilimda residents to ensure successful development across communities is an ethical guide to ensure just and fair relationships (table 8.7). This code of conduct for community interaction is a fascinating step by the people illustrating a remarkable public awareness of what is needed to live together in peace. The fact that the residents developed their own code of conduct has several implications. From their point of view the objective of this idea is to organise residents of all the communities - Hindus and Muslims, low and higher castes. Consequently, they believed they would have to develop a common code to overcome social and religious boundaries and stereotypes. For this reason all residents were called for a meeting and asked how the CLC should be run to give different communities and castes an opportunity to express their comments.

Table 8.7: Danilimda Code of Conduct
(*Kendranu Pratigya Patrak*)

Sr. No.	*Code printed on the backside of the students' assessment booklet in Danilimda*
1	Our centre will not follow any kind of religion or discrimination.
2	We shall put our efforts to derive at real truth.
3	We shall work to our fullest capacity.
4	We shall consider other people's opinion before making decisions.
5	We shall not involve ourselves in politics.
6	We shall not make any profit out of this activity [CLC]. Our main aim is to help the people.
7	We shall take the guidance of the learned for the development of the centre.
8	The centre's activities will contribute to the development/progress of the nation.
9	The main objective of the centre is human development.
10	I will follow my responsibility from within.

Such an initiative cannot be underestimated, for a code of conduct is an essential prerequisite to regulate interaction and also relationships of partners, which is precisely the approach taken in the conceptual framework. Given the difficult times of the establishment of the code, it is remarkable that the slum dwellers were able to come together to draft such norms in the spirit of joining forces for change and development. It may thus be considered as a 'best practice' for the SNP, where no such ethical framework exists. With regard to the development of suitable safeguards for interaction and conflict resolution, Tripathi (1998: 133) had called for better communication among the stakeholders early in the process. Since the SNP would

consist of an alliance of partners rather than an accidental collectivity, "[...] they [the partners] may have to set up some mechanism, formal or informal, to ensure effective communication between their representatives, and, through them, between themselves. [...]. An effective communication mechanism would help them to appreciate and accommodate one another's compulsions and sensitivities." However, such a normative framework has not been developed. Indeed, by discontinuing the *Sahbhagi Yojna*, the chance to develop a strategic vision to foster successful communication and manage interaction seems to have been given up for the time being.

CLCs and CRCs may be viewed as focal points of communication in slum areas that enhance the connectivity to other stakeholders and embeddedness in networks. According to DMI, CLCs may equally be regarded as an instrument for community accountability, because through them information is made public. Similarly, CRCs aim at linking local area information with city-wide data for urban development. The discussion illustrates that NGOs are essential to the promotion of grassroots communication in the slums. Capacity building prepares residents to better address and communicate with urban local bodies, since the people have more confidence and power to be listened to by local officials. Also, NGOs have the capacity to introduce new ideas and approaches, and the potential to bring together various stakeholders on an interpersonal basis.

Table 8.8: Types of Messages and Media used by the three Main Stakeholder Groups

To...	From:	Slum Dwellers	NGOs
AMC Officials	Types of messages: ➲ Application procedures ➲ Directives ➲ Policy papers Media: ➲ Fax ➲ Telephone ➲ Face-to-face ➲ Staff meetings ➲ Increasingly e-governance	Types of messages: ➲ Complaints ➲ Requests for gov./state/city programmes Media: ➲ Face-to-face ➲ Through NGOs ➲ Written application forms	Types of messages: ➲ Utilisation of GIS and Management Systems ➲ Living conditions in the slums ➲ Satisfaction of provided infrastructure (Report Card) ➲ Speak up to assist slum dwellers in obtaining a response from the AMC Media: ➲ Capacity building trainings ➲ Surveys ➲ Publications ➲ letters
Slum Dwellers	Types of messages: ➲ Tax payment orders, bills ➲ Government schemes ➲ Eviction from home and workplace (street vendors) ➲ Health education Media: ➲ Few personal contacts ➲ written forms ➲ Police force ➲ Publications in Gujarati ➲ Few public meetings	Types of messages: ➲ Gov./state schemes (unemployment) ➲ News about prices ➲ SNP scheme ➲ NGO activities ➲ All kinds of everyday issues Media: ➲ word by mouth ➲ from other slum areas ➲ informal community meetings	Types of messages: ➲ Livelihood ➲ Urban risks & social security ➲ Women's & children's rights ➲ Housing & infrastructure ➲ Community organisation/ mobilisation ➲ Utilisation of computer Media: ➲ Participatory workshops ➲ surveys ➲ Face-to-face contacts ➲ Publications in Gujarati ➲ Video screenings ➲ Traditional media
NGOs	Types of messages: ➲ request for assistance to mediate ➲ discuss technical issues in SNP areas: bills, infrastructure standards ➲ assistance in community development: health, social security Media: ➲ fieldstaff in the slums ➲ meetings ➲ letters ➲ press conferences	Types of messages: ➲ Seek assistance to deal with AMC officials ➲ Request for more information on micro-finance, employment, health ➲ Request for community centres, kindergartens, etc. Media: ➲ Face-to-face, usually leaders or a group of residents	Types of messages: ➲ Programme reviews ➲ Launch new initiatives Media: ➲ publications ➲ workshops ➲ meetings

VIII. Communicating Urban Risks

An examination of the types of messages and the media used by the three main stakeholder groups of the SNP illustrates their differences (table 8.8). Clearly visible is a mismatch between a much formalised style of messages sent by the AMC, which are primarily deployed to regulate and control the citizens and the less formal forms of communication employed by slum dwellers. Most of the messages of the AMC are irrelevant or not acceptable to slum dwellers and thus perceived as unfair. For instance, slum dwellers get tax bills for often arbitrary reasons. In Nitinagar, people received a bill twice for over Rs.84. A month later the bills already exceeded Rs.1,500 per household. The residents were upset and refused to pay the bills, because they did not understand what they were supposed to pay for as they are not provided with any facilities. They felt it to be an unjustified demand and decided to return the bills. In Meladinagar, people got unfair treatment by AMC officials regarding the overflow of gutter lines, which happens in the monsoon season only. AMC field staff however, visit the area only in the dry months and claim the residents are lying. It is apparently futile to negotiate on these grounds.

By contrast, activities of a number of NGOs foster processes of democratic decision-making in CBOs, gender equity, and the inclusion of the poor in various discourses through capacity building that links and connects AMC officials and slum dwellers in workshops and training. Furthermore, even though still in the initial phase, there is also an attempt in community centres to fill the technology gap between the illiterate poor and the computerised world that surrounds them. Even though the AMC and the NGOs may be seen as complementary in their approaches to communicate with slum dwellers, the central question is the way in which the AMC makes an effort to accommodate the communicative needs of its marginalised citizens.

8.3 Trust and Credibility

Fair communication and transparent decision-making processes enhance trust and credibility among partners. Several factors such as the framing of messages, reputation of participants, reciprocity of interaction and an open dialogue provide the environment to share knowledge and increase the credibility of actors and decisions. In the SNP, creating trust is ideally built on the partnership between all stakeholders. The empirical findings are displayed in table 8.9.

8.3.1 Intra-Slum Dynamics

As the analysis of the present CBO structure in Meladinagar illustrates, trust and credibility in the leadership is weak and disturbed by the inability of the leaders to solve problems. Similarly, the relationship between residents and their male leaders in Nitinagar is not without tension despite the positive dynamics of the leadership. People trust each other as neighbours, but many do not have much trust in their leaders, reported one woman. Although the leaders generally have the impression to have support from the community, they were aware that the residents are increasingly losing trust in them due to the lack of progress of the SNP until 2002. To this is added the belief by some residents that the leaders would receive money for their work. This limited trust and the reservations many residents have towards the leaders are rooted in a failed attempt to bring public services to the area since as long ago as 1996, when the leaders were forced to return money already collected to the residents.

Another reason for distrust and loss of credibility of the leaders at the time of fieldwork was a very similar situation. Due to the delay of the SNP in Nitinagar, the residents were sceptical of both the capacity of their leaders and the AMC. Adding oil to the fire were offers made by a third party (World Vision) to

implement the programme without requiring any financial contribution from the households. This offer partially diluted the philosophy of the SNP with its partnership approach that is based on a financial contribution by the slum dwellers. They confused the people about what to do, at the same time trapping the leaders between residents, various NGOs, and the AMC. These circumstances that produce distrust among the community are a notable obstacle in intra-settlement communication and inhibit an open debate, as people are not willing to make their voice public.

Even though the two leaders are very active and capable, they also have to succeed in their endeavours to improve the living conditions in their area otherwise their community will withdraw the already fragile trust. A loss of trust and credibility of the leaders can be accounted to insufficient communication rooted in two aspects which entail the procedures and circumstances. One is a lack of transparency due to endogenous actors, namely residents whose information needs are not met by the leaders, whereas the second is a lack of transparency caused by exogenous actors - the AMC and NGOs - who do not communicate sufficiently why processes stagnate or delays occur.

8.3.2 The AMC: Inbuilt Opacity and Miscommunication

Communication channels at work within the AMC are multi-facetted and reveal problems of unintentional and intentional miscommunication and non-communication. It is well known that this is a typical feature of many administrative systems in developing countries, which results in conflicts, duplication of efforts and inefficiency (Riley and Wakely 2003: 65 for a similar example). Even though the *modus operandi* of governance in Ahmedabad has received innovative impulses over the last

decade towards more citizen involvement and accountability, it is in no way facilitating transparent decision making and inclusive communication.

Tripathi accords the current philosophy of the administration to the heritage of British governance, which is "[...] based essentially on distrust and diffused responsibility. The Ahmedabad Municipal Corporation (AMC), like any other public system agency, continues to remain within the firm grip of such governing structure - temporary dynamism provided occasionally by some forward looking officials notwithstanding" (Tripathi 1998: 130-31). This structural neglect of norms and values, which would facilitate collaborative interaction with the citizens, is a fundamental issue in communication.

One NGO worker from a development communication network pointed out that some individual AMC officials are more cooperative than others. But generally the AMC fails to inform sufficiently on its schemes and activities by providing a platform for interaction between its officers and the citizens. The AMC is not interested in methods of community media such as street drama plays, card games, traditional puppet shows, picture stories and video shows. Evidently, the overall approach of the AMC to communication is characterised by an underdeveloped communication infrastructure, which does not go beyond public relations and information dissemination. Consequently communication of the AMC as a body is most of the time unorganised, irregular, and hardly viewed as being essential.

Communication tends to be understood as a narrow technical process of information management and distribution. This misconception of the notion of communication contrasts starkly with the understanding of communication in this study, notably the complexity of human interaction. As a consequence, 'typical patterns' of conflict can be observed, which happen all too easily when a dispute arises (like the water

issue in Meladinagar) that both parties - the community and the AMC - do not listen carefully to one another. Each of them attempts to either solve the problem independently or neglect it, thus creating a situation of misunderstandings and distrust. At the same time each of the actors generates their own story around the issue which blames the other party for improper activities. Thus, while blaming increasingly becomes the means in an atmosphere of distrust, reaching a mutual understanding is not honestly considered. Instead of creating a 'communicative circle' of negotiation, each party contributes to a 'vicious circle' of confrontation. Secretive and unethical action breeds further mistrust. For instance, a survey conducted secretly in the slums for the Sabarmati Riverfront Development Project became public making the residents of these areas angry and suspicious. I could notice this during my own field visits where residents were even hostile.[139]

Reciprocity of communicative interaction between slum dwellers and the AMC remains at a low level. Given circumstances and past experience of the slum dwellers explain their critical relationship with the AMC, which has a dubious reputation among the people. Slum residents are generally ambiguous in their attitude towards AMC officials. Even if in single cases the cooperation of individual officers is appreciated, there is little trust and belief in the 'AMC system'. Interaction is basically viewed as a struggle with bureaucracy. The increasing withdrawal of the AMC from community development in the SNP is partly responsible for this condition. It appears that the AMC perceives its partnership with the slum communities to be confined to cost sharing, while the 'soft partnership' is entirely left to NGOs. Yet building trust would require a lot of community work from the side of the AMC as well.

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[139] A partnership with the slum dwellers in this instance is not envisaged and they have been thus far excluded from the planning process. An unsuccessful relocation of some of these settlements had also taken place some time ago with most residents returning to the same locations soon after.

8.3.3 NGOs as Trust Builders

Lack of trust is a practical factor that may seriously hamper progress in projects and programmes based on partnerships. After the pilot project of the SNP the slow process of implementation and the question of up-scaling the programme began to occupy the actors. Two main reasons are responsible for the slow pace, namely community mobilisation (particularly for financial contribution) and the AMC procedures. Interestingly, AMC officials attribute the slow payment to inadequate promotion of the SNP and insufficient motivation of slum residents to meet their financial contribution. Particularly the latter task is assigned to NGOs which organise the community development. However, AMC officials are not always aware that this process needs time to generate trusting relationships. Especially when it comes to financial issues slum dwellers are reluctant unless they are convinced of the sincerity of the other actors.

Thus SEWA-MHT has to first gain the trust of residents in each area, for it began to work in many locations only after they had been selected for the programme. Contrary to this, the residents in Pravinnagar-Guptanagar were much more responsive in this regard as SAATH has been present there long before and had already built a good rapport. The director of SEWA-MHT pointed out how this fact indicates the importance of the time needed to establish functioning relationships. Because of the slow pace of the SNP all the actors have had the time to build the partnership. She was very clear that due to that factor "we could develop capacities, otherwise it could have backfired". Eventually all partners are submitted to a learning process, including NGOs which have to learn how to approach and interact with the urban authorities. She also highlighted, the *Shahbhagi Yojna* too demonstrated the importance of partnerships which would help deepen the process. Time seems to be a crucial factor in building successful partnerships.

VIII. Communicating Urban Risks

The *Shahbhagi Yojna* (Partnership Program) was a UPP initiated pilot project that brought together several urban stakeholders[140] including five slum communities. Linked up with the SNP it was intended to demonstrate and promote partnerships especially with the slum dwellers as a vehicle for better urban governance. Information and communication were seen as having a central role among these efforts. Unfortunately, after the completion of the pilot project no follow-up activities were envisaged and a more institutionalised relationship among the partners could not be established. Nonetheless, some lessons could be learned. Thus it was found that all stakeholders need to be closely involved in collecting information for instance for the Report Cards[141]. There has to exist mutual trust and complete understanding about the future use of such information, otherwise the exercise will have no impact on improving services. Communication gaps or barriers, which inhibit a smooth transmission of information, appear to be at work at this point. Communication between the stakeholders - UPP, AMC, other NGOs, slum communities - faced various difficulties. For instance, while it is recognised that the information infrastructure has a lot of potential to improve the quality of urban governance, it is not fully used: "Telling is that none of the partner organisations has used the

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[140] Namely UPP/FPI, Gujarat Mahila Sewa Housing Trust (GMSHT), AMC, Self Employed Womens Association-Community Waste Management (SEWA-CWM), SEWA Bank and Friends for Women's World Banking (FWWB).

[141] The report card was developed as a tool to gauge the problems of a particular, well defined target regarding the access to basic services such as basic amenities, education, health services, public transport, and so on. In addition, the report card method can be used to assess the quality of available services. The report card method is based on the idea that the poor's right to basic facilities cannot be realised by the municipal authorities alone but needs inputs from all urban stakeholders. Hence, this performance rating contributes to good urban governance in terms of structural feedback on the quality and availability of urban services. UPP has developed an interactive toolkit for three partner organisations, which can be used as report card for specific services. These toolkits can be installed on a computer in the offices of the partners and can be used by visiting community members. It is envisaged that this will facilitate the data collected and thus save resources. In addition, the tool package greatly enhances the analysis of the collected data, as all data are automatically stored in the computer. Information can be presented as reports, tables, or charts and can be sorted on the basis of locality, service, and time of data collection (Verhagen et al. 2002: 8-10). For more details of the process and experience in Bangalore see Paul 2006.

decision support services that is being offered by the UPP. [...] this is partly due to innovative character, and lack of awareness and capacity of potential partner organisations" (Verhagen et al. 2002: 17).

Communication obviously entails more than mere distribution of information. Knowledge transfer is a social task and not simply a technical mechanism. Lack of awareness, understanding and institutionalisation of processes are serious reasons for miscommunication and disruptions in a communicative process. It is very important to understand communication as a social interactive relationship as defined in the conceptual approach, otherwise it will remain a mere technical relation unable to create the so important soft skills. Hence it is essential for all actors to incorporate their partners in their own activities to better create a notion of trust and credibility, of fairness and last but not least of ownership. For this to happen, all stakeholders must be enabled to contribute to information collection and knowledge sharing. A participatory approach which involves all stakeholders in the generation of knowledge about the slums helps to bridge obstacles. It, however, requires a significant change in thinking as to the acceptance of various types of knowledge and rationality.

Table 8.9: The Four Twin Concepts and their Impact/Constraints on Communication – Trust and Credibility

Concepts	Constituting Principles	AMC	Slum Dwellers	NGOs	Impact/ Constraints
Trust & Credibility	➲ Reputation of participants ➲ Framing of messages ➲ Means of communication ➲ Duration of interaction of actors (the time factor) ➲ Reciprocity of exchange/interaction ➲ Transparency in communication and decision making ➲ Participation to create an 'intellectual capital' (shared knowledge)	Reputation of participants ▪ Frequent transfer of AMC officials disrupts communicative rapport with slum dwellers ▪ Corruption in administration/SNP-wing ▪ Commitment to development programmes not convincingly demonstrated to the public Framing of Messages ▪ In many cases residents do not understand decisions made by the AMC ▪ Slum dwellers requirements and capabilities largely ignored Means of Communication[142] ▪ no specific adaptation to people's preferences apart from using Gujarati ▪ primarily formal administrative channels that use Duration of interaction ▪ sporadic & irregular (slums) Reciprocity of exchange ▪ low with slum dwellers ▪ learned to approach NGOs Transparency in communication ▪ internal procedures not comprehensible for outsiders ▪ secretive action against slum dwellers breeds mistrust Shared knowledge ▪ low awareness of the need to incorporate others	Reputation of participants ▪ Leaders have difficulties to prove they work on behalf of the community ▪ Reputation of leaders often damaged due to some disputes over money Framing of Messages ▪ Local experiences ▪ Narratives embedded in stories, myths Means of Communication ▪ Predominantly verbal and face-to-face Reciprocity of exchange ▪ Reciprocity of interaction is not generated on an equal basis, information passed to residents only on their demand Transparency in communication ▪ AMC/NGOs do not inform appropriately about reasons of delays ▪ Informal means and irregular channels within the community undermine transparency Shared knowledge ▪ Decisions largely made by the leaders ▪ Thus shared knowledge is hardly created	Reputation of participants ▪ NGOs have ambivalent reputation (people are suspicious) Framing of Messages ▪ Awareness of local contexts and capabilities Means of Communication ▪ Participatory: workshops, meetings ▪ Integrating traditional media Duration of interaction ▪ long-term and locally (with slums) ▪ frequent contacts (with AMC) Reciprocity of exchange ▪ possible with the AMC ▪ works regarding knowledge exchange NGO-slum dwellers, but ▪ danger of giver-taker situation with slum communities Shared knowledge ▪ some NGOs began to build knowledge networks ▪ DMI and UPP have knowledge sharing as a major goal on their agenda	Long-lasting mistrust towards the AMC makes communication difficult Trust is build on lasting relationships Trust needs time Credibility is undermined by incapability/ unwillingness of AMC and also NGOs to implement promised activities Credibility not guaranteed due to lack of generating shared knowledge (see failure of introducing Report Card, GIS in AMC)

[142] For details see table 8.8.

8.4 Knowledge and Rationality

The plurality of risk rationalities resulting in discrepancies of understanding risks were contrasted in preceding chapters, namely the disaster event oriented notion of the AMC versus a livelihood centred risk perspective of the slum dwellers. This mismatch in defining the nature of risk and disaster is the essential foundation for communicating the issue, since at the outset of this study it was argued whoever would control the definition of risks also keeps control over the management. In order to understand the reality, it is inevitable to recognise a permanent competition of diverse discourses and the existence of multiple knowledge systems that are bound to different rationalities. This condition generates conflicts, which occur in cases when a group is able to challenge a dominant perspective and makes efforts to enter a discourse arena with its own arguments. Especially the ethics of a fair and just communication process incorporate a number of principles which aim at reconciling the multiplicity of knowledge and rationality (table 8.10).

Table 8.10: The Four Twin Concepts and their Impact/Constraints on Communication – Knowledge and Rationality

Concepts	Constituting Principles	AMC	Slum Dwellers	NGOs	Impact/ Constraints
Knowledge & Rationality	➲ Recognition of diversity of discourses ➲ Involvement of multiple stakeholders ➲ Identification of multiple knowledge ➲ Socially constructed arguments and meanings ➲ Normative & social judgements	Diversity of discourses ▪ No engagement in regular dialogues Multiple stakeholders ▪ partnership approach in urban development promoted Multiple knowledge ▪ not directly practiced, as AMC largely leaves community development to NGOs Arguments and meanings ▪ in few cases government schemes are named with symbolic titles using popular knowledge ▪ arguments are otherwise analysed according to scientific rationality and bureaucratic necessities Judgements ▪ according to bureaucratic procedures ▪ personal inclinations and corruptibility ▪ scientific studies & reports	Diversity of discourses ▪ unaware of the discourses Multiple stakeholders ▪ Unrecognised significant gap of perceptions between the leadership and the communities Multiple knowledge ▪ Are permanently confronted with 'knowledge' from outsiders: AMC, NGOs, researchers ▪ People's knowledge context specific Arguments and meanings ▪ locally constructed stories around recurring topics ▪ popular knowledge (stories, anecdotes, myths) employed to explain events ▪ faith embodied in everyday life decision-making Judgements ▪ based on experience, social norms and emotions	Diversity of discourses ▪ contrast different perspectives ▪ initiate alternative approaches to risk reduction Multiple Stakeholders ▪ participatory and people centred development planning Multiple knowledge ▪ Promote local knowledge ▪ Promote distribution and recognition of people's knowledge Judgements ▪ People's emotions and experiences are valued ▪ In accordance with donor agencies	most principles are not systematically utilised Only NGOs appear to attempt to work on these lines No awareness of different risk discourses (disaster relief vs. risk preparedness and long-term development) in AMC Differing risk perspectives of stakeholders not made an issue the realist viewpoint of risks dominates mainstream understanding

8.4.1 Slum Dwellers

To a large extent, knowledge and rationality of the slum communities relates to emotional arguments. This primarily addresses feelings, values and emotions. Most slum dwellers are used to a framing of messages in terms of unstructured narratives, which scrutinise motivations and values of policy makers, politicians and professionals. Likewise, they focus primarily on the consequences of hazardous activities or events, as these affect such emotions and values. Apparently there is a gap between the logic primarily employed by the Corporation and the logic applied by slum communities. As we have seen, the AMC attempts to present evidence in a logical and consistent way. Messages concerning hazardous technologies and natural disasters usually focus on 'low probability' and 'high consequence risks'. Only slowly are chronic impacts of environmental risks such as water scarcity and air pollution considered, but still with the same scientific approach and objectivity bias.

The following two tables (8.11, 8.12) summarise the character of the communicative events outlined above in the slum settlements in a structured way according to a number of categories that constitute a communication process. Accordingly, communication in Meladinagar and Nitinagar relies predominantly on informal and verbal channels with the result that the processes of communication are more sporadic than regular. Though leaders in both the areas play a crucial role as intermediaries and receivers of exogenous information, in most cases information flows occur between individual households. So, most of the incoming information is received via informal ways and then distributed from door-to-door. As a consequence, only some households receive information and many others do not. In spite of this, there is no doubt that in the most successful cases of communication the leaders form the interface between the residents and outside contacts. Nonetheless, they do not systematically direct and channel communication processes within the settlement.

It appears that the leaders do not know how to foster such processes, but it was also found that they are not always interested in doing so.

Table 8.11 : Information Sources and Flows for Selected Topics in Meladinagar

Topic	Medium of communication	Sender	Receiver	Form of message	Intermediaries	Type of information flow/frequency	Type of knowledge	Description of communication process
Riots	newspaper, tv, radio face-to-face	media *panwalla*	men of various households in Meladi.	written verbal visual	---------	daily one-/two-directional	narratives, rumours	unstructured informal
Health	newspaper, tv, radio face-to face	media, institutions, AMC/gov.	household members in Meladi.	written verbal visual	sometimes leaders	sporadic (seasonal) one-directional	scientific	non-participatory structured and unstructured
SNP	public meetings face-to-face	AMC NGOs other slum community	all residents of Melading.	verbal	NGOs leaders	two-directional	experiential scientific	informal (other slum) structured formal (AMC) participatory
Electricity	face-to-face	other slum community	all residents of Meladi.	verbal	leader	uni-directional	----------	systematic informal
Urban Risks	participatory worksops	NGO	selected residents leaders	visual verbal	----------	two-directional	experiential scientific anecdotal	systematic structured participatory

Table 8.12 : Information Sources and Flows for Selected Topics in Nitinagar

Topic	Medium of communication	Sender	Receiver	Form of message	Intermediaries	Type of information flow/frequency	Type of knowledge	Description of communication process
mployment (on a market)	publications face-to face	NGO family elders	elders individual households	written verbal	NGO	irregular sporadic	professional experiential	organised/ structured informal/ unstructured
Religion (Swadhyaya)	face-to-face tv	people from other slum	leader Niti residents	verbal visual	leader	recurring contact	beliefs & ethics	informal participatory
SNP	face to face public meetings	corporator AMC NGOs	leader Niti. residents	verbal	leaders NGOs	recurring contact two-directional	experiential scientific	formal (AMC) informal participatory
Education	face-to-face	people from adjacent slum	Niti. residents	Verbal	leaders	one-directional	experiential	informal
Riots	newspapers tv radio face-to-face	media housing societies	Niti. residents	written verbal visual	leader	one-directional	rumours journalistic reports	unstructured informal

The style of communication in the slums influences the type of knowledge used, since it is embedded in daily and informal networks. Sources of information usually define the type of knowledge, which in the slums originates in most cases from experiential knowledge, beliefs and rumours, and much less in formal or scientifically generated information. Experiential knowledge is rarely made explicit. Rather it is principally based on personalised stories and narratives about events such as floods,

diseases, riots or places to sell vegetables without harassment. Furthermore, people's knowledge is to a considerable extent shaped by their strong faith and beliefs. As demonstrated, behaviour and attitudes in accordance with such notions should not be underestimated, for they have an impact on people's day-to-day decisions and the choices they make.

8.4.2 The AMC

The preceding chapters and sections of this chapter have illustrated the context and basis of the dealings and procedures of the AMC. Several aspects indicate the AMC's firm roots in a conventional rational actor paradigm. Efforts at an induced policy change in the paradigm of risk management on the national and state level, and attempts towards a more participatory governance style of the urban authority could only show the direction of development, but have not significantly transformed the underpinning attitudes and notions in the administrative institutions. In theory, arguments and decisions made on urban planning issues are founded on an instrumental (purposive) rationality based on formal inferential logic. Nonetheless, normative and social judgements of individual officials and politicians dilute such decisions and inhibit the acceptance by public groups, since in practice decisions are eventually shaped according to bureaucratic procedures, personal inclinations and corruptibility.

In this way, the Corporation is hardly engaged in regular dialogue. It has difficulties in accepting various knowledge systems and those people who represent such knowledge, particularly marginalised slum communities, even though it pays tribute to the partnership approach in urban development. This is visible in the notion by which the AMC understands community development as a responsibility of the NGOs retreating to a large extent from direct interaction with the slum dwellers. Moreover,

the lack of social workers also prevents the Corporation from adequately understanding the processes of partnerships between NGOs and slum dwellers as well as between AMC officials and slum dwellers. As a result of this lack of responsiveness the AMC imposes its own rationality on others.

Logically, only messages which are accepted and acknowledged have the potential to achieve an outcome such as the transfer of resources or a speedy process. The following example taken from another context demonstrates in a very illuminating way the government's narrow rationale of accepting a certain type of knowledge. In a dispute over public transport, the Gandhinagar Passenger Association had prepared a number of memoranda, which were submitted to the state government. As so often, they did not receive an appropriate response. Then the association prepared together with FPI/UPP a Report Card to strengthen their position. Two major reasons for this shift were given by the chairman of the association. One is FPI/UPP's reputation as a renowned, credible organisation in public. Secondly, the report is viewed as a 'scientific' document and therefore it was hoped that it would be more recognised by the government.

Apparently, the people attempt to articulate their interest in using the same language (scientific) and means (report/study) for communication as used and understood by government officials. This case demonstrates that the citizens attempt to adjust to the authorities' rationale of communication to empower their voice and credibility in their message by utilising a well known NGO. The lessons we can learn from that are twofold. On the one hand, authorities are slow in changing their attitudes so that citizens have to adapt to the style of the government. This though imposes a certain style of communication, which is not a fair practice. Whereas on the other hand slum dwellers who do not have such insights into the politics of

communication with the authorities need more time, more training, more resources and more assistance if they want to take part in the game.

A few cases of communication, however, reflect some sensitivity by the authorities. The skilful framing of messages in order to accommodate socially constructed meanings is one such instance which implies sensitivity by the sender about the capabilities and understanding of the addressees. Even though I came across a beautiful example, it is unfortunately not an internalised practice of communication between the local authorities and its citizens. The title of one government scheme, *Kunvari nu mameru*[143] (literally 'gift by the maternal uncle to a virgin'), illustrates the significance of local knowledge in popular stories. By utilising the cultural literacy of the people the government indicates willingness and capability to communicate in an adaptive manner.

The title employs two aspects: social custom and legendary story telling. It indicates that the 'virgin' (*kunvari*) marriage, i.e. the first marriage in a family, is financially sponsored by this scheme. Translated into popular parlance it means that the *mama*'s position (maternal uncle) is symbolically assumed by the government. Another interesting implication why the government chose this name is connected to a story about Narsinh Mehta, a famous Gujarati poet of the middle ages, in which he was about to marry off his daughter. But he was a poor man and could not afford the *mameru* asked for by his in-laws[144]. Yet the people told him if God exists he will help him to pay a high *mameru* for his daughter. The poet accordingly began to sing *bhajans* (spiritual songs) in order to make God step down from heaven. Narsinh Mehta's chanting proved to be so fruitful that *Krishna Bhagvan* (Lord Krishna) himself transformed into the *mama* and enabled the poet to hand

[143] A *mama* is the maternal uncle (in this context: of the bride), who is requested to give a gift to the bride (his sister's daughter).

[144] If there is no maternal uncle, the father is asked to give the *mameru*.

over a generous *mameru*. According to this beautiful story, the government implicitly even assumes the role of *Krishna Bhagvan*.[145] The anecdote demonstrates that this type of faith based folk story is very much present in the collective mind of people and can be nicely employed by the government. Apparently ordinary people can easily relate to the meaning of this government scheme.

8.4.3 The NGOs

Socially constructed arguments and meanings are also relevant in the community work of NGOs. As highlighted in the methodology chapter, participatory workshops revealed noteworthy dimensions of communication between the involved field team (including the author) and the residents. In a conversation with one staff member after the workshops, I learned some intriguing details about the intricacies of the process. For example, the way the field team had posed questions was very important to enable the people to understand and get an idea of what we were interested in. Thus the staff member explained that it was necessary to give the residents examples, or to point at familiar topics and issues of their settlement to which the residents could easier refer. So, for the workshop it was certainly an advantage that all NGO workers knew the two research areas well.

Such rapport and in-depth knowledge about the residents and local situation makes interaction easier and more meaningful, since messages can be framed around concrete life examples and with respect to the residents' sentiments. The AMC finds this approach hard to follow, where the contact with the field is increasingly reduced by relying on NGOs as intermediaries. Recognition of the importance of using examples to make information more accessible and acceptable is pivotal to improving

[145] Narrated by a staff member of FPI/UPP.

the effectiveness of communication. Conventional channels and means of mass communication as used by the AMC do not pay much attention to this aspect.

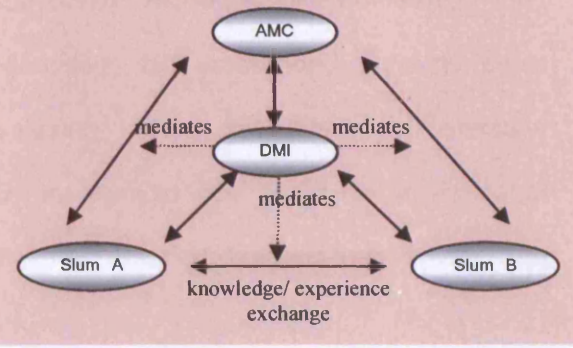
There is also evidence of a clash of socially constructed arguments between NGOs and slum dwellers during the implementation of the SNP in Nitinagar. During a visit in 2004 with SEWA-MHT staff a discussion about training triggered an emotional debate on its usefulness. According to the field staff, the residents had an eye mainly on the monetary benefit rather than the utility of knowledge. The people did not view it as an asset because for them survival and livelihood security have higher priority. The logic of argumentation and underlying rationality exhibits a purposive rationality from the resident's point of view. While the NGO argued with values of the educated middle class working with conceptual approaches ('knowledge is power'), the residents linked it instantly to the question whether it will have a direct impact on their living conditions or not.

In this regard the low performance of SEWA in this slum area makes it additionally difficult for the organisation to acquire the trust of the people as the utility of knowledge is defined in two different ways. Knowledge is viewed as an asset *per se* by the NGO, whereas the position of the slum dwellers implies that the utility of knowledge alone is not sufficient. It is important to communicate tangible outcomes of the usefulness of knowledge. During the *Shahbhagi Yojna*, for example, it was realised that information provided does not percolate to the majority of residents within an area. It rather remains knowledge of the leaders and a few residents who took part in trainings or workshops. Besides unsystematic informal ways of conveying messages through friends and relatives or the incompetence of leaders to disseminate information of such knowledge, there is also an indication that many people simply do not really know how to convert provided knowledge into (strategic) action, for instance to use it to enter better employment (Verhagen et al. 2002).

Evidently, type and utility of knowledge to be transferred is pivotal for individuals in order to be accepted and applicable.

Keeping the three main actors in mind, it seems that only NGOs are advocating the constituting principles as identified in this twin concept. For example, DMI's role is one of facilitating the flow of information, generating knowledge and making local knowledge of slum dwellers accessible to other actors, notably government and other NGOs, while at the same time distributing information among slum communities (figure 8.13). In such a way it also attempts to link these actors with each other through interpersonal encounters at training sessions and workshops. Moreover, it agitates on local, national and international level and aims at assuring a stream of information particularly from bottom-up. In this way DMI supports the promotion of accepting the existence and value of multiple knowledge and diverse rationalities.

Figure 8.13: DMI´s Position in the Communication Process



8.5 Conclusion

This case study illustrates that creating a collaborative, communicative environment is a time consuming and demanding task. All partners involved in the SNP are still learning that partnership and urban governance is a learning process in itself: fragile, dynamic, and slow. Changing and creating adequate conditions and institutions goes to the very roots of social organisation and the understanding of dealing with each other respectfully. In terms of actual gains for the slum dwellers, two types of outcome of communicative processes can be found in the two localities. In

VIII. Communicating Urban Risks

Meladinagar on one side tangible achievements like the implementation of the SNP and electricity connections contributed to a considerable increase in living standard and a notable reduction in environmental health risks. On the other side the processes have also generated intangible gains in terms of intensified access to and a higher degree of embeddedness of the community in networks with NGOs and knowledge about the AMC. Despite many shortcomings the established contacts seem to provide stronger communicative links, especially when compared to Nitinagar. However, as against the wide-spread frustration in Meladinagar, residents in Nitinagar have been filled with hope since opportunities for deeper embeddedness are just emerging with the implementation of the SNP.

The criteria by which communication processes can be described as successful and effective are not easy to pinpoint. In the end, whether communication has been successful or not depends on how the involved stakeholders interpret and judge the process and what its impacts are. The emphasis on the twin concepts highlights the complexity of communicative processes as socio-cultural rather than technical encounters. Following the conceptual framework of this study, a successful process would enable people to reach a platform of common mutual understanding which equips them to influence policy decisions. However, as emphasis is given to the procedural character of communication as an event over time, there are many more dimensions that play a less obvious but nevertheless crucial role. Thus the importance of institutions as encompassing rules and organizations that co-ordinate human behaviour has been stressed. Accordingly, communication has to take place in the realm of institutions and their transformation. Since these aspects are deeply embedded in cultural behaviour and values, the following chapter attempts to explore the ground for such criteria against Indian philosophical thinking.

Chapter IX

Conclusion

IX. Conclusion

In this final chapter I present a concise response to the hypothesis of the study (see box), its objectives and research questions.[146] The first section therefore summarises key research findings, followed by a description of the particular characteristics and limitations of the study. Keeping these in mind, the theoretical relevance is examined to demonstrate the thesis' unique and original contribution to knowledge. The chapter concludes with an outline of policy implications and further research opportunities.

> In India, risk communication is rarely acknowledged in slum improvement. The lack of knowledge and sustainable and participatory methods and tools, which recognise the diversity of local perceptions and notions of risk, constrain effective action for its mitigation.

9.1 Summary of Findings: Risk Communication in Urban Governance

9.1.1 Pro-poor Risk Communication as Integrated Policy Issue

The aim of this study is to contribute to knowledge in understanding communication processes about urban risks between poor slum dwellers and an urban local authority. Accordingly, the first principal statement of the hypothesis argues that risk communication is rarely acknowledged as a policy issue in urban development. The findings illustrate that in the case of India (notably Gujarat and Ahmedabad) several layers of dealing with this issue do exist. As Chapter 5.1.2

[146] To recall the principle research question: "In which way do and are poor communities able to communicate their perception and knowledge of risks to responsible municipal authorities, and how do these authorities respond?"

shows, at the national level there have been deliberate activities to make risk management a policy issue that reaches down to local authorities, whereas the states, which are relatively independent from the centre, tend to deal with risk management usually only after a devastating disaster. Although Gujarat is indeed one of the most progressive states when it comes to institutionalising (disaster) risk management, there is a wide gap between these newly established legal and organisational risk management frameworks and their practical implementation on the ground.

The next layer of risk management is that of the local authorities. Ahmedabad, as the seventh largest city in India, lags far behind the megacities of Delhi or Mumbai. Hitherto neither the state nor the municipal authority have seemed to see a need to establish a comprehensive risk management framework at city level. Until the formulation of the Ahmedabad City Development Plan 2006-2012, the city has been viewed as part of the district and not as a distinct entity with specific risk characteristics. However, it appears for the first time that there is a consensus among the city's policy makers to pay more attention to the management of risks in the urban development process. It is now more widely acknowledged that urban risks in India have their specific roots in the escalating growth of cities combined with failures in the urban development and land use planning practices. Hence tackling urban risks must be considered a central topic for comprehensive poverty alleviation and development policies. While the new development plan addresses these issues to some extent, the institutional framework and organisational arrangements for the integration of risk mitigation into urban planning are not discussed.

As noted in Chapter V, the Gujarat Slum Policy briefly mentions how to deal with slum settlements in disaster-prone areas. This policy could be viewed as limiting AMC's room for action as the corporation is caught between policies preventing it from addressing risks in this kind of area. One may see in this

the limitations of risk communication. Yet it is precisely here that it is needed and where the AMC is lacking capacity to deal with the issue. For example, the AMC has responded to this issue already in the lake development and conservation projects by starting to resettle those dwellers who reside close to lakes or encroach on natural water drainage and flow-off areas in the city. However, the shortcomings of these usually public private partnership projects are that they do not embrace a consultation and participation process with the slum dwellers. Apparently there is no will within the AMC to follow a deliberately pro-poor approach in resolving such contested issues in order to protect low-income city dwellers.[147] The point is that such a procedure follows a typical stereotype of urban planning in which the AMC alone decides what and who is at risk.

In times of accelerated globalisation and concomitant threats of eviction and resettlement for the urban poor, this study on risk communication emphasises the need to identify risks by searching for a mutual understanding of all stakeholders' perspectives, notions, levels of risks and the reasons why they are so. Also, to engage in negotiations for resolving issues and thereby maybe even prevent encroachment (especially when people are resettled to prevent that they are moving back to the same place). While the argument starts from the point that there are different risk perceptions, communication in the development process involves much more than just by recognising this fact. It seeks to find solutions which are tangible and sustainable, since they are based on a long-term relationship between the various actors in the urban arena.

Another argument sometimes brought forward as hindering the introduction of urban risk reduction is the issue of scarce resources, that the AMC and other local urban authorities lack the means to address risks. This may be partially

[147] At the same time one has to keep in mind that particularly on the western periphery and the outskirts of the urban agglomeration many middle-class high-rise buildings were erected in flood-prone areas which are not demolished and suffer each year from heavy water-logging. It is apparently easier to resettle makeshift huts than such structures, and therefore a fair treatment for those squatters is even more needed.

true, if resources are merely seen as financial, and if it is seen from a reactive, i.e. disaster relief and reconstruction viewpoint. But, firstly, it is basically a matter of setting priorities, and secondly, the endeavour of integrating risks in considerations of the overall urban development of the city as a preventive and pro-active rather than responsive and reactive, measure. This is one of the main arguments of the thesis, namely that the cost/benefit calculation renders preparedness and prevention as more sustainable and cost saving than any post disaster relief measures. Thus the central questions are 'how can this kind of thinking be mainstreamed?', 'how can institutions such as the AMC be more responsive and flexible in taking up relevant policy issues?'. As the findings indicate, it is difficult for the AMC to generate the drive for such changes from within, and when they take place it takes time. Human resource management is another obstacle in this regard. Chapter VII highlighted that the AMC does not have social and community workers on the staff at the SNP-Cell. They are incapacitated in this respect and unaware of this need. This does not have to come at extra costs, because if a position is vacant it is a 'strategic' decision whether to fill it with someone other than an engineer. Eventually, a rethinking is necessary to change certain approaches, worldviews, taken-for-granted procedures and attitudes without necessarily increased financial costs.

Since the initiatives taken to tackle urban risks are fairly recent, it remains open to question whether urban disaster management plans will be implemented effectively or just become another part of the administrative bureaucracy. The discussions in Chapters V and VII show evidence of an increasing government commitment to risk management in urban areas. The intention to direct it towards a local-level approach relies in part on the participation of those who are most at risk. This is visible at the national level, but the city development plan of Ahmedabad does not embrace such an approach. This refers to the second principle statement of the hypothesis which postulates a lack of understanding in the areas of sustainable and participatory tools that enable the

fostering of communication of diverse risk perceptions and notions in order to inform local, micro-level action for risk mitigation.

9.1.2 Holistic versus Analytical Risk Perceptions[148]

The findings of the empirical Chapter VI underscore the importance of micro analysis at the local level in order to gain an insight into the variety and complexity of poor communities' risk conditions and perceptions. While on the surface most risk types seem to occur in both the case study areas and thus appear to be 'objective', the perception of intensity and a person's relation to these risks, whether and how to mitigate them, depends on the conditioning framework of the socio-cultural environment, a person's experience and the collective knowledge. The study thus applies a holistic perspective in understanding these risk conditions and identifying their root causes, especially the links between them.

A comparison between the two slums and the overall data gained from the analysis yield two key issues that characterise the risk position of each area. In Meladinagar it is the dynamic process of change induced by globalisation, resulting in the frustration of many residents. Contrasting with this, in Nitinagar perpetual insecurity of employment and chronic poverty define ever-present conditions of risk. Thus it may be argued that, in Meladinagar, a new pattern of risks has emerged triggered by the massive breakdown of the old industries due to the impact of globalisation.

The accounts of the two slum areas demonstrate the rich and constant experience that their inhabitants have in terms of the history, impact, recurrence

[148] This section responds to the following research objectives: understand poor communities' perspectives and experience on urban risks; examine knowledge and rationality in poor communities' coping mechanisms; understand the position and attitude of the municipality in terms of urban risks and governance.

and linkages of risks in their localities. As demonstrated in Chapter VI, relative levels of vulnerability to risks on settlement level are conditioned by the local circumstances. In both the localities an accumulation of the various day-to-day risks surface with the advent of disastrous events such as riots or heavy flooding, highlighting the interface between poverty and vulnerability. In Nitinagar though, a constantly high risk level in almost all risk spheres is prevalent due to the permanent deprivation of the residents. Risk adaptability and coping mechanisms exist on a very low level with larger calamities leaving the community at the mercy of outside help. Whereas in Meladinagar an increase in vulnerability is observed particularly in the employment arena which has considerable impact on other risk spheres such as health care and education. In spite of the upgrading of infrastructure facilities, a willingness to adapt to the novel employment conditions is low because they are perceived as adding to the degeneration of living conditions.

Although slum dwellers have an idea of coping with risks, they also understand their limits. Especially when outsiders such as government and NGOs are viewed as having responsibility and capacities to support their efforts in minimising risks. In terms of options to reduce and respond to risks, Meladinagar appears more elaborate. There the strategies involve a higher degree of financial means in resource mobilisation. This is indicated in a more widespread use of various insurances, the existence of bank accounts and even the purchase of stock shares. Moreover, household equipment equally demonstrates the relative affluence of Meladinagar's residents compared to the apparent poverty in Nitinagar. The relatively skilled home-based self-employment in Meladinagar also highlights the degree of difference between the two areas.

One of the significant findings of the research has been the concern with reputation and the meeting of customary social demands. Especially in the context of low-income communities it is necessary to explain why community

obligations are more important than business in settlements which suffer such serious poverty and indebtedness. The responses from informants show that obligations are important, but not at all times more than the business. Even though there are some strong statements which support such an impression, for most people it was a very ambivalent issue, because they maintain the social network and sustain social capital. There seems to be no single answer to it, rather it is dependent on the situation (financial and relationship to relatives, etc.) what people eventually decide to do. This aspect relates very much to respect and social prestige, of losing one's face and the family's reputation. Furthermore, indebtedness is often in part the result of fulfilling the social norms. It is exactly this point which contributes to people's ambivalence, hence it is frequently a decision between increased debt in exchange of an increased social security. In many cases it was pointed out by the residents that they meet these customs in order to maintain their reputation, even if they have to borrow money. This, they argued, provides them with a certain assurance that they can expect help in times of crisis as the system of obligations is based on reciprocity. A reputed family is socially integrated, and both credible and creditable, which proves to be an essential advantage in times of need as it opens up a resource group that can be 'tapped'. Thus social prestige as 'symbolic capital' may be viewed as an 'investment' to generate such 'resource groups'.[149]

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[149] I have dealt with this aspect in another context in Gujarat (Woiwode 2001), where the traditional merchant castes, the Banias, followed elaborate practices revolving around the concept of *abru*, which combines both social prestige and credit-worthiness. In this case the 'symbolic capital' (see Bourdieu 1977), that is social prestige, generates the foundation for laying the 'social capital' in terms of family ties and other socio-religio-economic networks. A number of principles of social prestige may be derived from the concept of *abru* (Cort 1991, Hardiman 1996, Haynes 1991): Social prestige provides a basis for assessing an individual's and family's '(trust)worthiness' in terms of social (and economic) interaction and marriage alliances. It relates to honourability in interaction with others within one's own community and thus brings in a component of interaction which can do without any formalised contractual agreement. There is also an intergenerational effect, namely that prestige can be built up over generations and can be inherited. Social integration is viewed as the necessary prerequisite to open a pool of 'resource groups'. Social integration has to be achieved and sustained, Hardiman (1996: 76) states for the Bania that honour means also credit-worthiness, and both in combination form "the moral backbone of society". So to be socially integrated an individual and the family have to act in a socially and religiously adequate and by

Gender differentials in risk exposure within the settlements were also pronounced. The case studies demonstrate this in two ways. On the one hand the women are more vulnerable than men to deprived living conditions characterised by inadequate sanitation and water supply, harassment in public places and the double burden of running a household and doing casual labour. On the other it is widows who invariably face even more severe conditions, since they are not only at risk from the above factors but additionally are often forced to transgress their prescribed social roles. This puts them in a difficult position in terms of their interaction on a social level in order to reduce their risks.

Turning to the level of the municipal corporation (Chapter VII), the current governance structure of the Ahmedabad Municipal Corporation is not equipped to tackle risks faced by slum dwellers. In general, the manner in which the corporation and the slum dwellers tackle risks can be traced in their notions and organisational structures and cultures, which exhibit differences in their constructed realities and presumptions. Contrasting these risk perceptions also reveals implications of how communication takes place. Principally, within the AMC risks are dealt with on a sectoral, top-down, technical basis with a focus largely on macro-level (city-wide) disaster risks rather than daily risks faced by slum dwellers. On the one hand this situation produces a kind of technical-oriented, and somewhat vague 'meta-perception' about risks in the city by the AMC as an organisation. On the other hand at the department level there is awareness about specific risks faced by the citizens such as health issues in slums. These two levels, however, are not analysed, systematically linked and brought together. One serious consequence of such an institutional set up is that the complexity of the risk context is compartmentalized, i.e. it is *a priori* split into technical sectors by discipline and dealt with separately. Hence, the limited available knowledge is fragmented and only partially rooted in experience. As a result, root

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the community accepted way (i.e. right conduct and fulfilling the duties of social/religious obligations).

causes and effects are only partially understood, but more essentially their links are by and large not considered. In terms of policy development this often means that the impacts of an intervention on other sectors or areas are either unknown or neglected.

In contrast, as illustrated in Chapter VI, slum dwellers apply a much more integrated understanding of their risk circumstances at the predominantly micro-level of the locations in which they live and work. These two perspectives (grossly simplified) are illustrated in figure 9.1. Their perspective is to a high degree holistic, contextualised and based on experience of everyday life in which disasters are recurring and often unavoidable sporadic events such as drinking water shortages and health risks. For them, risks materialise cumulatively in small-scale disasters. Necessarily, and in stark contrast to the policies of the AMC, risks are so much part of people's life that they have internalised strategies of coping and adaptation. In spite of their intimate experiences, their life is determined by basic survival with choices to be made between bad and worse scenarios. On account of the limited resources and choices they have, it is the norm rather than exception that many slum dwellers suffer from superimposed risks such as environmental degradation and health hazards. Thus opportunities for long-term preparedness or mitigation are usually overridden by necessary immediate response measures.

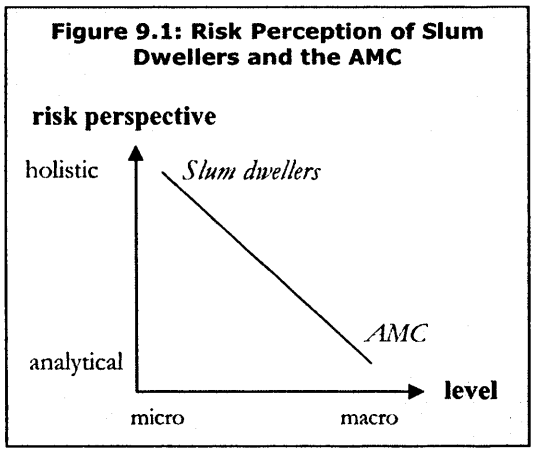

Figure 9.1: Risk Perception of Slum Dwellers and the AMC

At yet another level of risk perception, the prevalent approach to risk management by governments emphasises natural disaster reduction with a focus on low probability but high impact calamities, whereas empirical evidence in the slum settlements shows high probability of adverse effects that coincides with a

slow but equally catastrophic impact on the inhabitants. This is a serious mismatch when it comes to media and public attention and policy formulation, as slums are often not given a priority in the wider urban development process. Within the AMC, both patterns of viewpoints are discernible:

a. low probability - high and sudden impact: this condition stresses disaster risks and affects potentially everyone (e.g. floods in the city, earthquakes also hit middle and upper classes), but usually the poor are the most vulnerable;
b. high probability - (s)low impact, frequently and consistently accumulating and regressing: stresses hazards such as insufficient infrastructure and sanitation, health and environmental hazards marked by an unjust distribution as it almost exclusively affects the poor and marginalized (e.g. drinking water availability and quality in the city).

Pattern a) is certainly the dominant view among the majority of officials in the AMC. In this view risks are chiefly conceived as natural disaster risks and therefore responses mainly emphasise measures for relief and rehabilitation. Pattern b) in contrast, is widely neglected by the municipality, as the poor are not at the forefront of the urban development agenda that focuses on globalisation. As a result, efforts to link or integrate (disaster) risk management as preventive measures with development programmes and issues are only slowly emerging.

This view corresponds with the technical approach to a professionally executed town planning practice and the prevalent ideology of sanitising squatter settlements, which has a long tradition in India (see Mann 2005: 253-256). A shift of this paradigm towards a more open and citizen friendly attitude is only slowly becoming noticeable. The SNP and other initiatives subscribe to this, but

the overall planning practice is not strategically oriented and still too deeply rooted in the traditional premises of physical planning. Thus, due to the insignificance of pattern b), issues of urban poverty and socially entrenched risk conditions such as caste and other social divisions which are rooted in complex cultural beliefs and dispositions are mostly excluded. Hitherto, the connection between these aspects and their connection to urban development have rarely been examined. But as the findings of the case studies illustrate, these dimensions cannot be airbrushed out of the whole picture by the local authority if urban risks are to be better understood as socio-cultural phenomena.

9.1.3 Risk Communication as Human Interaction[150]

Based on these observations on risk construction, it is possible to identify both barriers of communication and indicators of normative criteria that could facilitate and enable sound communication processes. The findings, detailed in Chapter VIII, show that communication has not been used strategically to negotiate urban risks among stakeholders in Ahmedabad. Apart from some NGO activities, clear lines of communication between the parties, acknowledging normative and ethical concerns of communication, have not been developed. The SNP partnership has not enabled the development of an institutionalised communication mechanism with structures for problem solving and conflict resolution. The response to conflicts is pragmatic and *ad-hoc*.

The costs and benefits of risk communication of such a process have not been assessed by the potential stakeholders. According to the findings, slum residents can yield tangible and intangible benefits from it. Thus the case of Meladinagar illustrates a higher degree of embeddedness in a network of NGOs and the

[150] The relevant research objectives are as follows: describe and understand communication processes, the means, channels, mechanisms and contents employed by different agents; understand mismatches between different stakeholders and the reasons for them.

AMC bodies. Being connected to such agencies enhances their access to otherwise inaccessible information and events regarding the wider city and issues of their concern. There are personal and institutional links with NGOs and AMC bodies that may contribute to an increased social acceptance in the long term. While Meladinagar displays a more established (but not institutionalised) arrangement of interaction, in Nitinagar it is the leaders who played a central role in accessing useful information which led eventually to the commencement of the SNP in this area. So here it is clearly visible that the communication process, even though not conceived as a strategy, brought about tangible change. It is significant though, that most of the residents did not invest much time in this process in the beginning. Two reasons seem to account for this. One is that they left it to the leaders who were very active, while the other is the sheer mistrust towards government schemes and related activities as they have hardly ever benefited them.

At this point it is also worth reiterating that the flow of information and the communication processes within the slum settlements were not inclusive. While it is unsurprising that widows do often not participate due to their time constraints, in both the slums the opinions on the ways of communicating and the distribution of information between the leaders and the residents was criticised for being unorganised or even unwanted. This is a critical point and a challenge for all communication processes, even those which are carefully planned.

As outlined in Chapter III, the emphasis of the research is on the process and procedures, and not on unique events after which communication is completed. To offer a conceptual approach and draw attention to this dimension of urban governance with a view to urban risk reduction in order to build poor urban residents' resilience by enhancing their chances of uplift is the specific contribution of this study. Consequently, the key findings suggest that a meaningful communication process can only take place, if the interaction between

stakeholders is understood as a human relationship which goes beyond techno-bureaucratic co-ordination and the currently prevailing ('Western') understanding of communication. The challenge, therefore, has been to delineate criteria as a basis for 'good' or 'effective' communication.

Figure 9.2: Framework of Risk Communication for Risk Mitigation

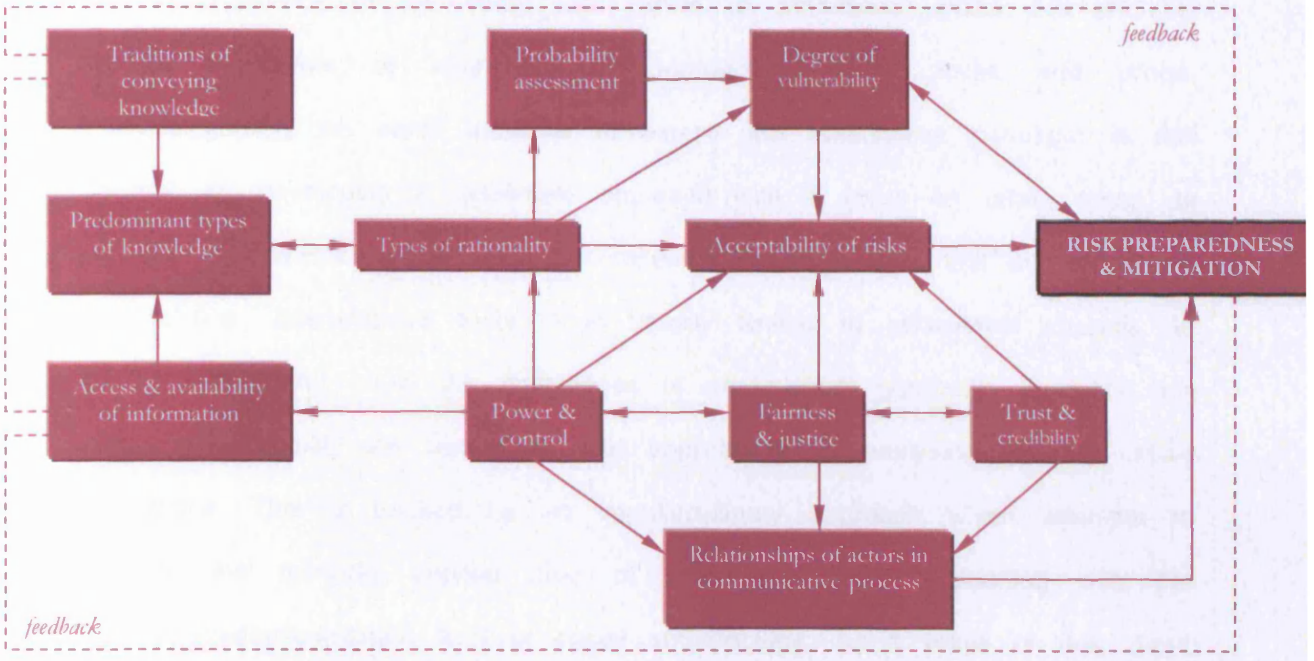

Figure 9.2 draws together empirical insights gained from the research findings with the deductive theoretical concepts that have been expounded. Accordingly, information and traditions of knowledge transfer interact interdependently and shape the predominant types of knowledge in a social and cultural setting. The twin concepts - power/control, fairness/justice, trust/credibility - are crucial in defining relationships between stakeholders. This influences both the communication of risks and the outcome of risk mitigation efforts. Inclusion in decision-making contributes to an enhanced acceptability of risk levels in the endeavour of identifying and prioritising risks. In turn, as norms for partnerships have the power to increase mutual understanding and strengthen interaction, the process of preparedness and risk mitigation can potentially become smoother. Above all, the

success of risk reduction measures eventually helps to build up and strengthen resilience, which determines the degree of vulnerability of poor urban communities. Practical experience of risk preparedness and mitigation then feeds back additional data which contribute to a review of existing information and knowledge, thus acting as a potential source to improved risk prevention and preparedness.

9.2 Characteristics and Limitations of the Study

The characteristics of the study also define its limitations, which are primarily two-fold in terms of methodological approach and of focus and scope. Methodologically, the study attempts to extend the quantitative paradigm in risk research by developing a qualitative approach with a focus on urban areas as the unit of analysis. While qualitative research uses primarily text and narratives as analytical, interpretative tools, it is usually limited to micro-level analysis. In the context of this study the advantages of an in-depth qualitative approach are utilised to exemplify the usefulness and applicability for analysing complex urban phenomena. This is backed by an interdisciplinary approach which attempts to reconcile the primarily applied area of urban development planning with the strongly academic-oriented field of social anthropology. As a result of this, there is a risk that urban planners may feel that many of the arguments and viewpoints brought forward in this study are too abstract and difficult to translate into practice. Social anthropologists may argue that the research is superficial by anthropological standards and has been corrupted by cross-disciplinary necessities such as a relatively short period of fieldwork and the limited application of anthropological methods.

A significant aspect of the study is the focus of risk analysis on the connections and interdependencies at a micro-level, i.e. two slum locations in Ahmedabad. The macro-social dimension of Gujarati or even Indian society has not been touched upon comprehensively. Such studies need further empirical evidence

concerning processes such as modernisation, westernisation, and individualisation. Also outside the limits of this study is a linguistic analysis which interprets in detail the language of risk discourses in Ahmedabad across various social groups and actors. While I consider this aspect crucial to communication, the decision to exclude this aspect was made deliberately at the outset of the research. It would require a different methodological approach of textual and discourse analysis and an intimate knowledge of Gujarati. I do, nonetheless, view this as a field where further research could vitally improve the knowledge of different risk rationales which may feed into changes in policy making.

The major theoretical implications from these methodological features relate to some pivotal findings. As highlighted in Chapter II, while anthropological work does provide enrichment to statistical risk assessments, its major contribution may be more in documenting the diverse, fluid, complex and contested categorisations and relationships which constitute the reality that risk management endeavours must tackle on the ground. It again exposes the inevitability of communicating risks in complex social environments.

9.3 Theoretical Relevance: A Distinct Conceptual Framework[151]

Key to the value of this research is its contribution in developing an original, multi-disciplinary, conceptual framework for the study of risk communication in urban areas. In Chapter III it is argued that difficulties in defining 'risk' are to a considerable extent a result of the nature of the concept, as there are multiple attributions characterising 'risk', but none is *necessary* to define it. This often confusing aspect becomes evident in all risk debates and it took a while until it was recognised in the epistemologies of risk theories. The history of theoretical

[151] The relevant research objective is: develop criteria that are useful to describe what is essential for 'good', 'symmetrical' and/or 'effective' communication.

development of risk perspectives illustrates this well (Chapter 2.2). In the course of time new conceptual elements have been added, generating a more precise picture of the phenomenon:

1. the early quantitative technical risk assessment which was merely able to consider probability and the magnitude of consequences,
2. the psychometric notion of the rational individual adding personal preferences, values and beliefs,
3. the macro-sociological perspectives, including a critique on procedures and diagnosing the politicisation of risk, up to
4. anthropological theorising that emphasises the symbolic and interactive aspects of risk.

Various fields have contributed specific dimensions of risk to provide further understanding, which is reflected in most contemporary conceptualisations of risk. This complexity is one reason why I avoided a seemingly clear-cut definition of 'risk' and preferred to focus on a 'conceptualisation' which is better able to incorporate the various theoretical dimensions. The evolution of progressive insights into the nature of risk has not been independent from the practice of managing risks. Theoretical premises have always essentially influenced the ontology of risk, and therefore ideas and notions about how to act and manage it. This development has been explored in order to demonstrate in which way risk communication has emerged as a new element in coping with risks. In this the synthesising of different theories became inevitable to provide the ground for the conceptual framework with its salient components. This was needed since no theory of risk communication exists. Moreover, the specificity of the urban context has not hitherto been included in such considerations, which have made it necessary to establish a framework that does include this aspect.

Institutional transformation, then, appears to be a central issue having two distinct but inter-linked functions. On one hand institutional changes may have the potential to change people's behaviour and perspectives of risk, thus potentially resulting in the mitigation of risks and a more adequate response. On the other hand institutional transformation has the potential to enhance democratic relationships between diverse agents in the risk arena, thus supporting the development of more adequate 'symmetrical' communication processes. Good governance as a democratic practice to make institutions and rules more effective encompasses among others participation, responsiveness, accountability and transparency. As such communication between stakeholders is implicit.

Participation in this context particularly signifies a *means* to be able to communicate, while communication as a democratic practice in urban governance holds participation as an *end*. In accordance with this postulate and the understanding of risk, communication has been conceived as a dynamic, interactional, cultural practice that constructs meaning by cooperation and negotiation (Chapter 1.4). However, while participation is one of the current buzzwords in development, it is at the same time apparent that there are innumerable approaches, philosophies, and levels of participation, not all of which are particularly democratic or supportive in terms of poverty alleviation and risk reduction.[152] At times it is hard to identify whether participation is fashion, method or political vision, as Beckmann (1997) contends. Hence it is critical that the notion of participation is related to a set of norms and ethics so as to prevent or minimise a detrimental impact. The case studies underscore this dilemma with different levels of participation in the SNP and capacities of the groups and individuals taking part.

[152] See e.g. Cooke and Kothari's (2001) edited volume for one of the most pronounced critical reflections on participation in development practice.

In this context, the idea of the inclusive city through deliberate urban governance is believed to provide a suitable background, for it allows for the incorporation of Habermas' communicative theory and discourse ethics. This approach is particularly useful for the 'risk forum' metaphor in which norms and values on the meaning of risks are generated and communicated. Above all, it should not be forgotten that the success of inclusive discourses is interdependent with the acceptability of risks. In summary, any response to risks by a planning authority or other societal institutions is inadequate when the decision is not accepted within the society it purports to serve.

9.4 Policy Implications and Areas for further Research

The research approach and the findings suggest areas for improved policy making and for further research as well. A direct link to policy making is established in the last section of the hypothesis. It is expected that the outcome of the research will contribute to a better understanding of urban risk situations in the social and cultural contexts of poor communities, especially in India. Therefore, this investigation is regarded as a potential basis for generating practical guidelines for mitigation policies and their links to urban governance. With an understanding of these processes and interaction, and a more applicable integration of communities with participatory urban risk mitigation it promotes knowledge for collaborative negotiation and mediation in the field of urban development planning. This is underlined in the action research approach in this study focusing on community centred risk reduction.

A very practical extension lies in the potential for operationalisation and further concretisation of the conceptual framework as a tool for analysis and policy intervention. The twin concepts in particular can be further converted into a set of questions to be asked in order to analyse issues and diagnose shortcomings in a specific environment. The results gained from this exercise may be utilised

to develop a community oriented communication strategy for urban governance. As to the risk analysis approach, the emphasis on applying a holistic viewpoint in identifying interdependencies and links between risk conditions and their causes has the advantage of indicating impacts in other areas of living conditions. It is therefore of particular value for the development of concrete *integrative* action plans particularly at settlement level that consider economic, health, environmental and social factors, since a recurrent issue of current development policies in India is that they are not linked to each other.

Building on this, one crucial finding relates to the need of incorporating and mainstreaming new development issues into urban policies. Empirical evidence provided in Chapter VII indicates that the municipal corporation has difficulties in taking on emerging cross-cutting topics. It appears that the reform drive of the mid-1990s has not produced an impact that can facilitate such processes. Yet in a world of rapid change there is a need to establish mechanisms which allow new issues to be picked up and translated into policies. The SNP has been utilised particularly by SEWA to integrate several of its activities. However, the dependence of local NGOs on international donor agencies can severely hamper the sustainability of development interventions if the continuation and development of successful pilot projects is not envisaged.

Returning to the relevance of the findings to the Indian national risk management process, legislation and administration that is introduced briefly in Chapter V, we find a strong argument for a greater role of urban bodies. One interpretation of the 74th Constitutional Amendment Act suggests that the critical urban functions of urban planning, regulation of land-use, sanitation and solid waste management, slum improvement, and poverty alleviation are to be assigned to municipalities or shared with other agents (Venkateswarlu 1998: 243-44). The discussion of the findings touches squarely on these issues, thus indicating that risk management should also be included amongst these responsibilities.

In terms of further research required to clarify and deepen some of the subjects raised in this study, a major area is the need to conduct further regional and municipal studies in India, on 'risk' and 'communication'. Macro-level economic changes together with issues of the modernisation and westernisation of the society raise the fundamental question of how 'risk' coincides with 'Western' categories of the individualisation of society, urbanisation and globalisation process. This is a field of special interest for urban sociologists and anthropologists. Such risk studies may focus not only on poor communities but on the entire spectrum of society in order to look into social urban networks, social capital and risk pooling/sharing. The scope for research in this area is immense.

APPENDIX

1 Appendix: Chapter I

Map: Location of Ahmedabad in India
(source: Hust, Evelin and Michael Mann, eds., 2005, Urbanization and Governance in India, New Delhi: Manohar, p. 32.)

2 Appendix: Chapter II

2.1 Table: Risk Perspectives in Different Academic Disciplines (based on Renn 1992a: 53-79)

TYPE OF RISK CONCEPT	CHARACTERISTICS / IMPLICATIONS	WEAKNESS/CRITICISM
Technical risk analyses Actuarial approach Toxicology/Epidemology Probabilistic risk assessments	➢ One-dimensional, but universal use of a single variable: physical harm ➢ Anticipate potential physical harm ➢ Average events over time, space by using relative frequencies ➢ Instrumental function in society: reduction, mitigation of risk through improvements in reliability and safety of technological systems	⇒ Perception of undesirable effects depends on values and preferences ⇒ technical risk analyses are not able to capture complexity of social systems/structures ⇒ influence of organisational malfunctions to risks is neglected ⇒ aggregate calculations neglect lifestyle factors and anecdotal knowledge
Economic perspective on risk Economics of risk	➢ one-dimensional, universal variable of satisfaction/dissatisfaction (utility) ➢ subjective satisfaction with potential consequences ➢ utilities provide common denominator: enables each individual to compare options with different benefit profiles according to overall satisfaction ➢ cost-benefit consideration	⇒ most decisions on risk are collective (public/meritocratic goods) and not made by individuals ⇒ many transactions between individuals imply imposition on third parties (social costs, external effects) ⇒ major issue: rational actor paradigm, reliance on utilitarian ethics
Psychological perspectives on risk Psychology of risk	➢ multidimensional: integration of belief systems ➢ focus on personal preferences for probabilities ➢ importance of contextual variables: not only cost-benefit calculation but avoidance of major disasters ➢ familiarity with context provides additional information to calibrate individual judgements	⇒ focus on individual and subjective estimates ⇒ hard to find a common denominator for comparing individual risk perceptions ⇒ no explanation why individuals select certain characteristics of risk and ignore others ⇒ translation in policies impossible
Sociological perspectives on risk Social theories of risk: rational actor concept social mobilisation theory organisational theory Neo-Marxist and critical theory Social constructionist concepts	➢ variety of approaches provides rather different ideas of risk ➢ objective and constructivist concepts differ in view of the nature of risk and its manifestations ➢ individualistic or structural concepts: focus either on the individual or a social aggregate ➢ sociological perspectives emphasise the need to base risk policies on experience of inequities, unfairness, and perceived social incompetence	⇒ reduction of complex social reality supports subjective selection and ideological reasoning ⇒ theoretical concept is influencing outcome of analysis ⇒ complex reality offers empirical proof for almost any perspective ⇒ social actors in society often select the perspective that best serves their interests and ignore those perspectives that are antagonistic to their interests
Cultural perspectives on risk Anthropological theories of risk: structural constructivist approach	➢ interpretation of social experience of risk ➢ social responses to risk are determined by prototypes of cultural belief patterns: clusters of related convictions and perceptions of reality ➢ does not apply to individual attitudes or convictions but to larger social aggregates such as organised groups or institutions ➢ cultural prototypes to analyse and explain risks and risk strategies	⇒ claim that cultural theory is sufficient to explain social processing of risk ("cultural imperialism", "cultural determinism") ⇒ reductionism: cultural prototypes a plausible hypothesis in analysing risk responses, but not an exclusive explanation

3 Appendix: Chapter IV

3.1 Some Remarks on Ethics in Fieldwork

All kind of social research raises ethical issues at some point. The philosophy of the research strategy bears already highly ethical values. In spite of this framework there are other complementary dimensions, which emerge during the actual fieldwork situation. For this reason I would like to illuminate some ethical issues which appeared to be relevant either during the fieldwork or afterwards. In order to better structure the argument it is of great value to recur to some codes or guidelines of ethics as they are offered by various anthropological organisations to researchers or applied/development anthropologists. I decided to comparatively utilise the codes of ethics of four such professional organisations, namely the *American Anthropological Association* (AAA), the *Association of Social Anthropologists of the Commonwealth* (ASA), the *National Association for the Practice of Anthropology* (NAPA), and the German based *Workgroup Development Anthropology* (AGEE e.V.) to see in which way they match with the premises of (action) research.

It is possible to identify some salient features which (all) the four codes of ethics have in common and relate them to circumstances I had to face while doing fieldwork. Among them are *respect, anonymity and confidentiality, informed consent, openness, reciprocity,* and *anticipating harms*. From my point of view doing social research is basically a matter of social relationships- relationships to individuals and various groups. Insofar as the researcher enters the world of the 'subjects' of the research one has to make decisions about form and content of involvement and responsibilities this entails (Wilson 1992). Once this is understood it is much easier to accept and deal with ethical issues.

Respect is a crucial and central dimension, it involves a personal and moral relationship between the researcher and other people. The ability to maintain respect for different values, points of view and life plans is not always easy to implement. It is inevitable to build on trust and reciprocity under such circumstances. What it does not mean is the "acceptance of all values without criticism, but a constructive reflection" (AGEE e.V.). Instead it encompasses a particular sensitivity in one's personal attitudes, which is important to remain able for criticism and self-reflection regarding the disregard of cultural rules and norms. In my case I had to get used to certain aspects of work culture prevalent in the NGOs and the municipal corporation on the one side. On the other, one has to pay attention to aspects of respect during data collection itself, that is the principle of free decision of respondents to take part, suitable time and period of research (respecting working hours, holidays and festivals, etc.), but also to abide by the principle of *'informed consent'*. From a methodological point of view this is also important to secure the quality of data – an informant who is unwilling or even has been forced to talk will most likely make up some nice stories.

Informed consent expresses the belief in the need for truthful and respectful exchanges between researcher and the people of the study. This was one of the most difficult aspects to be handled while doing fieldwork. An explanation had to be given repeatedly regarding purpose of study, anticipated consequences of the research, anticipated uses of the data, possible benefits of the study and possible harm or discomfort that might affect participants, issues and the degree of confidentiality of personal identity (see ASA code). Informing others about the research is a dynamic process, and not something that is done once and for all in the beginning. This may be seen as the basis for good relations between the researcher and the researched.

I have had many difficulties in conveying the 'message' of my research to the slum dwellers. Although I tried to use easy language and relate it to their daily activities, it often appeared too abstract. This was always a major problem for the people. They generally had difficulties to accept that the perspective is long-term, and outcomes would not be visible by tomorrow. Due to their pressing problems of everyday life this perspective collided with their short-term demands and expectations. Despite this I decided to be open and explain that communication and their relation to other actors in the city is a complex one. I provided examples by pointing at their own way of communication among themselves. It can be stated that it was hard to do the depth interviews, since people had problems to grasp the idea of the research, whereas the workshops can be viewed as a sort of enlightening

experience. They gave a vital opportunity to inform the residents about the intentions of the research by a process of learning.

Transparency comes into play here as another critical issue. Basically, transparency is about informing the people regarding aims, purpose and methods of research. But in case there is more than one actor – which is usual - , a selected transparency may be practised to protect interests of specific groups (especially the underprivileged). It is possible that for such reasons the principle of transparency is only applied for the 'target group' of research. Usually it goes hand in hand with considerations of *protection of data and informants*, a matter of disclosure and anonymity. In any case, one has to carefully estimate what kind of information is given to whom. I did not face any serious problem with the issue of political importance of information, but as mentioned above, it is hard to achieve transparency if the people have difficulties in understanding the purpose and outcome of a project.

Reciprocity is one of the most crucial and essential dimensions in doing fieldwork. The statement which maintains that fieldwork is a social relationship comes to light especially in this point. What can one do to give in return? what is appropriate? and when to give it? are only some of the questions that arise. It is principally understood that one has to maintain a non-exploitative attitude and behaviour towards the people. In my case I decided to give in return in different ways. First of all I took the position and role of an 'undisclosed advocacy'. It partially happened on purpose and by coincidence. While doing the research in the two slum areas in collaboration with an NGO it was inevitable that we came across various issues during the interviews. These gave rise for ideas of further initiative by the NGO. As a result - wanted or not - this was a sort of promotion for these two particular slum areas. On the other hand, like many researchers do, I had built good relationships with the people there, and therefore had the feeling I should do something more concrete. This idea came up due to the discussions about the impacts of my research. At the end of the fieldwork I believed a proper moment has come to donate some money[153] to an NGO to support the establishment for much needed 'Community Resource Centres' in both the locations as a symbolic contribution which underlines and supports the spirit of my research topic. I believe this was an essential step since it may allow other researchers to do fieldwork there as well. Thus it is a kind of responsibility not only to the people but also to fellow researchers. I knew from my own experience in one of the areas how difficult it can be to access the people if their opinion on researchers and NGOs is a negative one.

Apart from this 'material present' I believed it is also important to emphasise the human relationship which I had with the slum dwellers. During my work I have taken many photographs of the residents and their area, and my digital camera found great interest because after having taken photographs we would watch the pictures together. In order to fulfil this criterion, I prepared my 'emotional' gift in the shape of a photo album and handed it over to them on my last visit.

Anticipating harms refers to minimising disturbances of research participants. I would like to highlight one aspect of my fieldwork which may be named 'avoiding undue intrusion' (ASA code). When I did my one-week observation exercise in one of the slums I had to realise that use of specific methods can be very critical. It is obvious that such kind of participant observation in a slum may cause too much excitement and trouble among the people, hence changing the entire situation in a neighbourhood. It may be concluded that such a situation can jeopardise the research as it may lead under certain circumstances to too much stress for the residents and the researcher as well. Ultimately, one has to be very careful indeed so as not to spoil the entire research in a specific locality, thus losing valuable sources for the research.

Consulted References

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[153] I have earned this money while doing an evaluation of one of the NGOs programme's, and found it justified to return it to them supporting their work and at the same time the slum dwellers.

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3.2 The Research Questions

The *fundamental research question* resulting from the hypothesis as mentioned in Chapter II is the point of departure for the construction of other questions and the interviews (see chart below):

> *In which way do and are poor communities able to communicate their perception and knowledge of risks to responsible municipal authorities, and how do these authorities respond?*

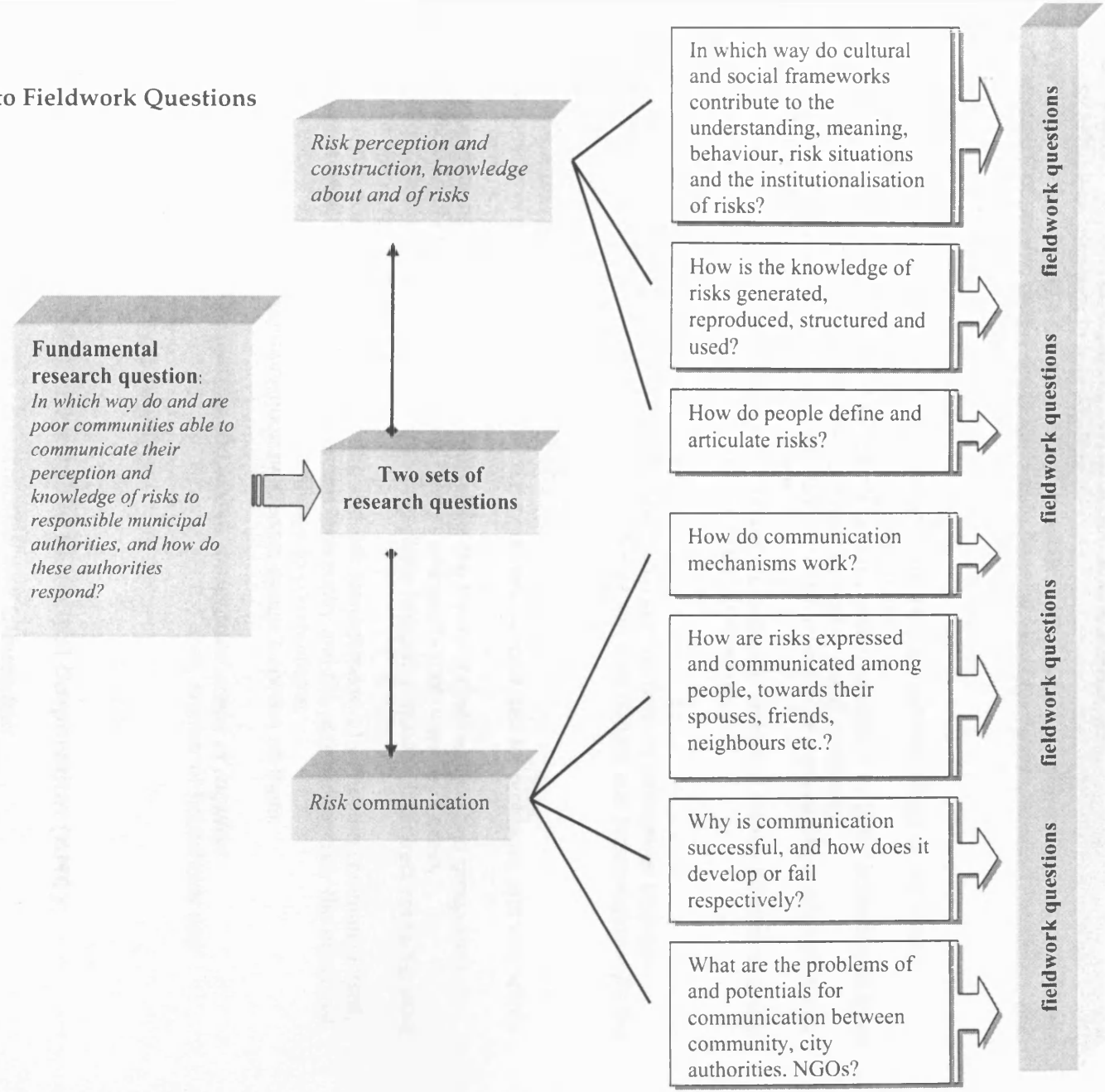
This question splits further up into two different but strongly interrelated blocks of questions. One is related to the construction of risk, while the other refers to the communication of risk perceptions. According to the content of Chapters II and III, the table below displays the main concepts that are to be analysed and interpreted with the data collected. The questions cover dimensions of risk-relevance and risk communication. The dimensions of risk communication are all elements to 'measure' communication in terms of the participatory democratic paradigm of inclusion and social justice. The table is divided only for analytical reasons into the risk and risk communication dimensions. In fact, as the overlapping of dimensions demonstrates, definition and coping strategies of risks resemble communicative processes of human interaction.

Table: Criteria to examine during fieldwork

Risk-relevant dimensions as identified in theoretical chapter	Dimensions of risk communication as identified in theoretical chapter
▪ Fairness and justice ▪ Rationality, knowledge and information ▪ Power and control ▪ Trust and credibility ▪ Acceptability ▪ Vulnerability	▪ Fairness and justice ▪ Rationality, knowledge and information ▪ Power and control ▪ Trust and credibility

The figure below illustrates the link from the research questions towards fieldwork questions.

From Research Questions to Fieldwork Questions



3.3 Research Topic Guide: Slum Community

According to the chart *From research questions to fieldwork questions* three interconnected bodies of inquiry are as follows:

A. The domain of risk perception, construction and knowledge:

1) physical hygiene: dealings in everyday life

Ask people to describe major things of their daily routine, especially regarding infrastructural facilities such as supply of potable water, sewerage, waste disposal, drainage system, housing conditions, and so on.

2) ritual and spiritual purity:

The social system (caste, gender, 'rites de passage') and links to understandings of risk related concepts like impurity, auspiciousness, feelings of danger etc.
Etymology and classification of domains regarding terms used by people may differ according to caste (mostly reference to Brahmanical Hinduism), gender and other social categories.
Relation of pollution/disorderliness etc. with danger, which thus can be extended to a concept of risk (cause-effect is clearly perceived by the people).
Coping with misfortune and risk: what kind of rituals are deployed and what is their function and role for people in terms of managing 'danger', 'risk' and related concepts.

3) disaster risks:

Approach this issue through asking about seasonal behaviour, particularly differences between monsoon and other seasons; includes also other types of so-called natural and technological risks like earthquakes, cyclones, industrial sites.

B. Risk communication:

1. Mechanisms of consultation among slum people: who is consulted for problems, and why within their community/kin group, friends etc.
2. Decision-making in terms of dealing with risks: the family/household level and group level. Organisation of community leadership, powers and exertion of power by leaders.
3. Contacts and interaction with municipal authorities, frequency, quality: like direct contacts, what kind of officers appear (if at all).
4. Ways and procedures of problem solving and risk management: a) within the community itself, transmission of knowledge; b) between the community and the public (especially the municipal corporation), use of media, channels, language to communicate.
5. Role of NGOs in these communication processes; people's opinion on them.

C. Further issues, partially relating the above mentioned areas of inquiry:

1. Physical characteristics of selected slums, mapping the area, number of households and individuals living there.
2. Risks as 'dangers' and/or 'opportunities'.

3.4 Research Topic Guide: Ahmedabad Municipal Corporation (AMC)

A. The domain of risk perception, construction and knowledge:

The generation of risk knowledge in respective departments (urban planning, infrastructure, etc.) of AMC:
Types of risk and prioritisation; definition of relevant risks in slum areas/ in Ahmedabad Urban Agglomeration.
Origin of risk definitions: scientists and scientific institutions and organisations on national and international scale, workshops with NGOs.

Policy and planning:

Features of the policy framework in general, and in particular integration of risk specific policy into other sectoral/cross-sectoral policies such as for example the environment, poverty.

Mainstream responsibility for risk issues:

Location of risk issues/management in AMC: the units/departments/people responsible for risk management.
The resources (control over and access to) within the organisational structure.

B. Risk communication:

Ways and procedures[154] of problem solving and risk management:

a) within the municipal body itself, transmission of and access to knowledge;
b) between the municipal bodies and the public, especially slum communities, type of media, channels, language to communicate;
c) procedures of risk management: preparedness, disaster management, problem solving in general; the usual ways, hierarchies of decision-making in AMC (may be guidelines, terms of reference, manuals etc.).

Methodology: The extent to which current methodologies are applied in the formulation, implementation, monitoring and evaluation of policies, programmes, projects incorporate risk issues.

1. Kind of skills and techniques used in AMC.
2. Organisation of a project/programme cycle: in this case especially the Slum-networking Programme.
3. Lack of clarity/ability about the implications of new cross-cutting issues (like gender, environment, poverty).
4. Possibility to integrate risk as a variable into existing policy and planning methodologies. Or difficulties in introducing risk as a variable: challenges the basic assumptions of existing methodologies and therefore may alter them fundamentally (these two questions, taken from Levy 1996: 3, are almost identical with and correspond particularly with the abstract research question in the chart *from research questions to fieldwork questions*).

C. Further issues, partially relating the above mentioned areas of inquiry:

Political commitment:
Political commitment in AMC to specifically integrate risk issues as a cross-cutting dimension into development activities. If there is one, where does this commitment lie? What is the underlying policy approach of this commitment (which types and priorities of risk, resources, procedures, methodology etc. are explicitly or implicitly recognised/employed/changed)?

Resources (financial):
Willingness to allocate current programme resources to risk issues in mainstream policies, programmes and projects.

Miscellaneous:
Aspects and dimensions within AMC that potentially contribute to a higher degree or the production of risks on account of organisational structures, procedures and an "organisational culture".

3.5 Leading Questions for household-wise risk identification and perception

1. Kind of insecurities, dangers and threats do you think affect you and your household?
e.g. in terms of

a) employment,
b) health: illness, epidemic, child care
c) education,
d) societal: obligations towards relatives (money at certain occasions), marriage (dowry = "*dahej*"), women's position,
e) violence and crime,
f) environmental: air pollution, noise pollution, industries, infrastructure,
g) natural events: floods, storms, earthquakes etc.

2. What do you think are the three most significant dangers?
3. What are the principle reasons for this being a good neighbourhood?

[154] Procedures understood as the routinised daily activities associated with different points of the programme/project cycle of an organisation or rules governing actions within or between organisations and individuals (Levy 1996: 9).

4. What are the principle reasons for this being a bad neighbourhood?
5. How do you attempt to cope with these dangers?
6. What kind of limits do you think restrict your activities to cope with these dangers?
7. What would you need to manage the dangers in a better way?
   (e.g. information, funds, coordination, initiative, government interest)
8. Who do you feel is most responsible for reducing dangers in your community?
9. Can you describe what you think is dirty in this slum area, and why you think so?
10. What, in the opposite, do you think is a clean condition in your slum area?

3.6 Leading questions for communication of risk in slums

1. Who do you consult whenever you have problems? (within your household, who of your relatives, neighbours etc.)
2. Who supports you in times of crisis?
3. What kind of decisions do you make within your household? (money investment, child education, your own job opportunities, etc.)
4. What are the problems discussed and resolved by all the people in this area?
5. If there are decisions made by all, who is organising meetings?
6. Who speaks for different persons? (e.g. women, youth, etc.)
7. Which types of organisation exist within your community that are non-governmental? (CBO, religious, trade organisations, development organisations, etc.)
8. Did or do you personally/or the household have any contact with AMC? How do you try to contact AMC?
9. If there is any contact, what kind of issues are raised?
10. How is the response of AMC?
11. Do you have the feeling AMC officers understand your concerns? If not, what is the reason?
12. Did AMC contact you in the past? If yes, what was the reason? How did they get in touch with you?
13. Where do you get your information from about these dangers and threats? (NGOs, GOs, media such as radio/tv/newspaper, meetings etc.)

3.7 List of Interviews and Participatory Sessions

Table 2: Meladinagar Slum Area

Sr.No.	*Date*	*Respondents*	*Topic*
1.	22/10/02	Individual depth interview	On situation in Meladinagar, living conditions and difficulties in her family
2.	24/10/02	Introductory group discussion	Broad discussion on people's risk perception
3.	30/10/02	Individual depth interview	His daily life activities, less emphasis on risks
4.	30/10/02	Individual depth interview	Their daily activities, less emphasis on risks
5.	12/11/02 29/11/02 04/04/04	Individual depth interviews	Risk perception and identification
6.	12/11/02	Individual depth interview	Risk perception and identification
7.	13/11/02	Individual depth interview	Risk perception and identification
8.	13/11/02	Individual depth interview	Risk perception and identification
9.	13/11/02	Group Discussion with women	Debate about CBO, NGO, water facility
10.	19/11/02	Mother and son depth interview	Risk perception and identification
11.	19/11/02	Three women group discussion	Work, household, marriage situation
12	30/11/02	Group discussion with some leaders and residents, 4-6 participants	CBO management, relation CBO and residents and AMC
13.	13/12/02	depth interview with two men	About election and riot risk Water issue
14.	13/12//02 04/04/04	Individual depth interview with widow	Risk perception and identification

15.	13/12/02	Individual depth interview	Risk perception and identification
16.	16/01/03	Participatory Group Session, women	Risk perception, area mapping
17.	17/01/03	Participatory Group Session, men	Risk perception, area mapping
18.	18/01/03	Participatory Group Session, women and men	Communication, CBO, problems and resources
19.	04/04/04	Woman leader	CBO and leadership in the slum

Table 2: Nitinagar Slum Area

Sr.No.	*Date*	*Respondents*	*Topic*
1.	23/10/02	Introductory group discussion	Broad discussion on their risk perception
2.	31/10/02	Individual depth interview	Their daily activities, less emphasis on risks
3.	11/11/02	Individual depth interview	Risk perception and identification
4.	11/11/02 08/04/04	Individual depth interviews with male leader	Risk perception and identification Implementation of SNP
5.	14/11/02	Individual depth interview	Risk perception and identification
6.	14/11/02	Individual depth interview	Risk perception and identification
7.	20/11/02	depth interview with a couple	Risk perception and identification
8.	20/11/02	Individual depth interview	Risk perception and identification
9.	21/11/02	Individual depth interview	Risk perception and identification
10.	21/11/02 17/12/02	Individual depth interview with male leader	Parivartan and earlier efforts to improve area
11	17/12/02	depth interview with two women	Risk perception and identification
12.	23/01/03	Participatory Group Session, women	Risk perception, area mapping
13.	24/01/03	Participatory Group Session, men	Risk perception, area mapping
14.	25/01/03	Participatory Group Session	Communication, CBO, problems and resources
15.	06/04/04	SEWA-MHT facilitated group discussion with residents	Implementation of ongoing SNP in the area

Table 3: AMC, NGOs, other professionals (academics, etc.)

Sr.No.	*Date*	*Respondent*	*Topic*
1.	18/09/02	Manu Gupta, SEEDS	Urban Risk Reduction in Delhi, TDR project
2.	23/10/02	Prof. Rabindra Vasavada, Architect	Slums, riots, AMC, A´bad politics and economy
3.	14/11/02	Mihirbhai Bhatt, Director DMI and FPI	AMC, SNP, politics in the city
4.	15/11/02	Dr Yashesh Anantani, City Manager's Association Gujarat	SNP institutional set-up and experience of co-ordination
5.	15/11/02	Debashish Nayak, Heritage Cell AMC	Partnership and cooperation with AMC
6.	18/11/02	Dilip Gor, Assistant City Engineer, West Zone Office, AMC	Relation slum dwellers and AMC, maintenance
7.	02/12/02	Rajendra Joshi, SAATH Director	SAATH's SNP experience in community development
8.	02/12/02	Nayanbhai Zinzuwadia and Rajesh Patel, Town Development Unit in SNP	Their SNP experience, approval of areas etc.
9.	05/12/02	Tejalben and Dipeshbhai, DMI	Urban Risk Projects, TDR and KAR-projects
10.	10/12/02	Anand Patel and Rajesh Patel, AMC, SNP wing	SNP, AMC structure, town development plan
11	11/12/02 07/04/04	Madhu Bharti, Assistant Professor, CEPT	AMC structure and procedures, SNP
12.	11/12/02	Sharadbala Joshi, private consultant, urban development	WB, DFID, UNDP-Water Sanitation Program South Asia and their involvement in SPV
13.	20/12/02	Prof Dwijendra Tripathi, Historian and Author of SNP publication, Mrs. Jyoti Jumani, communication consultant and author of SNP publication	SNP experience from pilot phase till recent, 2 publications on SNP

14	08/01/03 22/01/03	Himanshubhai Kinkani, publication staff at DMI	DMI/FPI publications, newspapers in Abad
15.	08/01/03	Mr. B.H. Patel, Deputy Chief Officer, Fire, Fire Brigade Ahmedabad	Activities, incidents, cooperation with other departments
16.	13/01/03	Mr. Makwana, Public Health Officer, AMC	Departmental activities, public health, cooperation
17.	15/01/03	Mrs Bijalben Bhatt, coordinator SEWA Mahila Housing Trust (MHT)	SNP experience, partnership NGOs and AMC and slum dwellers
18.	21/01/03	Mr Banubhai Chauhan, Dy. Town Development Officer, AMC	Urban development/ planning and risk management
19.	21/01/03	Mr Vatsal Patel, Assistant City Planner, City Planning Unit, AMC	Urban risk management, GSDMA, BAPTY India
20.	22/01/03	Mr P. Panneervel, Ahmedabad Municipal Commissioner	former head of GSDMA, urban disaster/risk mitigation, initiatives in Gujarat and Abad, e-governance in Abad
21.	04/02/03	Mr. Bupendra Shah, Publicity Assistant, Publicity Department, AMC	AMC´s outreach to the public, functions of the department
22.	04/02/03	Mr B.P. Shah, Planning Officer, Planning Department, also in charge of the Urban Community Development Department, AMC	UCD programmes, functions of the department
23.	05/02/03	Mr. Shailesh Trivedi, Babtie India Consultants	New proposal for complete review of development control regulations (DCRs), Gujarat disaster mitigation and urban development
24.	06/02/03	Saurav Mukheree, journalist, civic issues, Times of India, Abad	Newspapers in Abad, style of reporting, issues reported
25.	06/02/03	Shyam Parekh, journalist, environmental issues, Times of India, Abad	Abad urban development and environmental impact
26.	10/02/03	Mr B.R. Balachandran, Exec. Dir. Environmental Planning Collaborative (EPC), Bharati Ghodke, Architect	Bhuj reconstruction plan, people´s participation, hurdles and success
27.	07/04/04	Sanjay Dave, Charkha – Development Communication Network	Documentation of development efforts in Ahmedabad and Gujarat
28.	31/03/04	Nayanbhai Zinzuwadia, SNP-Cell, AMC	Current situation and changes in AMC and SNP-cell
28.	14/04/04	Vandanaben Chauhan, Urban Planning Partnerships (UPP)	Community Resource Centres

3.8 Booklet: Participatory Workshop

Participatory Session on Risk Communication

Baseline Information of Participants
(To be filled in before the session)

1. Name of participant: Age:

Jati (caste): Religion:

2. House Number:

3. Number and age of members in the household (names not compulsory):

4. Occupation of participant:

5. Other earning household members and their occupation:

6. Monthly/daily income of participant:

7. Monthly/daily income of household:

8. Since when living in the area:

9. Migration from which place:

10. Born at which place:

11. Education of participant:

12. Education of other household members:

13. House ownership: rent own property

14. Member/leader of CBO or community:

Participatory Community Risk Assessment and Communication Session

Time: 1 day per session, day 1: men's group, day 2: women's group, day 3: half day conclusion and comparison

Procedure: women groups and men groups separate with 12 - max. 18 members in two slums of Ahmedabad; sub-grouping with 3-4 participants for specific group work

Organisation: one FPI team member for each subgroup; for plenary sessions two protocols for documentation of discussion; plenary sessions guided by FPI member, if possible assisted by member of community; one translator, photo documentation of sessions

Equipment: flipcharts/poster size paper, one-shot cameras (4 per session, total 16), pens different colours

Selection criteria for participants: gender, age, education, livelihood (income), women headed households, lane-wise (spatial distribution in area)

Part I - Risk Identification, Vulnerability and Capacity Assessment

1. How do you feel? My fears, dangers, insecurities, and disasters

Subgroups: Discuss and fill in individually

What kind of dangers, fears and insecurities do you perceive? Explain briefly the reasons why these hazards pose a risk for you. Then rank the risks according to the scale: too risky (1)-more risky (2)-risky (3)-less safe (4)-safe (5).

Sr. No.	Types of hazard	Risks perceived (please tick)	Explain why a risk: include duration of hazard occurrence, time of year (when?), frequency (every day, seasonally, yearly, once a while, once a lifetime), recoverability, severity of consequences, etc.	Ranking of Risks (use scale)
1.	**Employment situation: insecure, accidents, casual**			
2.	**health: illness, epidemic, child care**			
3.	**Educational situation: expensive, no quality, of no use**			
4.	**Social situation: obligations towards relatives, marriage, women's position**			
5.	**Riots, violence and crime**			
6.	**Environmental situation: air pollution, noise pollution, industries, infrastructure**			
7.	**natural events: floods, storms, earthquakes, etc.**			
8.	**Other risks not mentioned above: road accidents, food insecurity, etc.**			

2. What is your neighbourhood like? Mapping your area

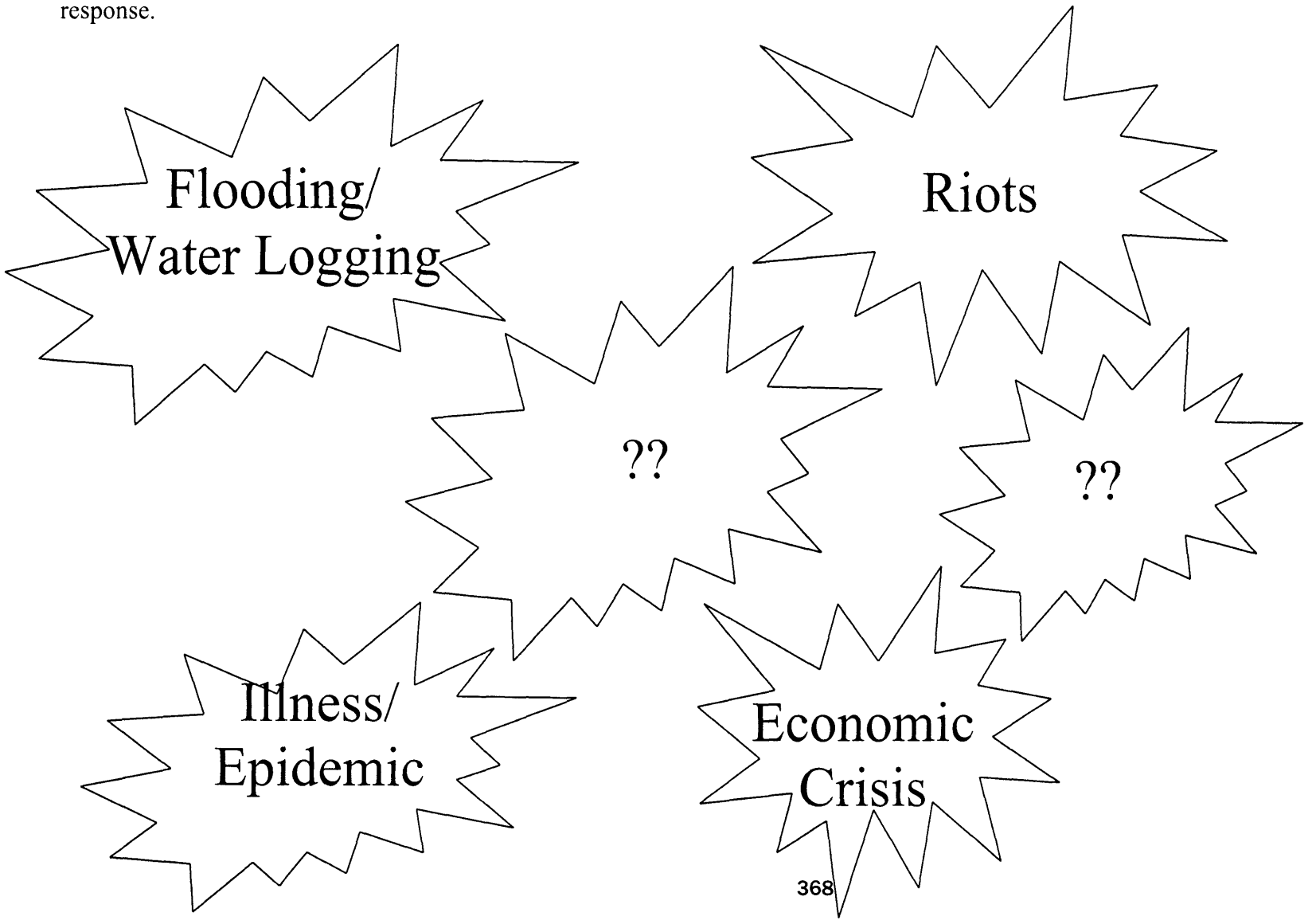
Subgroups: regrouping according to specific groups within the community such as elderly, leaders. We can call children for this exercise too.

Map your area and mark places of significance such as main features and landmarks, households which are vulnerable to particular hazards, location of resources that can be utilised for preparedness and mitigation. Write short comments in the map. You can also show links to surrounding areas, etc. **Afterwards go through your area and take pictures of these places (is that possible with one-shot cameras?)**

3. My experience with disasters and extraordinary events

Subgroups: Discuss in group, select one event and write individually

What kind of disasters did occur in your area in the last three years? Kindly describe your experience with one such disaster, focus on how you coped, mention damage and loss, how it affected your life during and after the event (shift, debts, unemployment, diseases, etc.), government response.



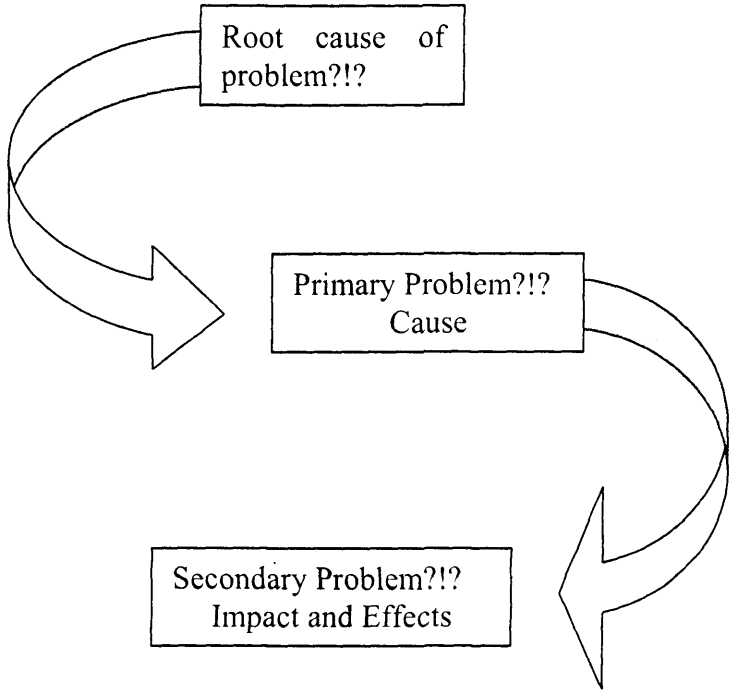
4. Where are the root causes imposing on our lives ?

Plenary Session: Problem analysis diagram showing interplay of "root causes and their effects"

This exercise is based on the tasks and knowledge gained by the participants during the activities done before.

Discussion:

- What are voluntary/involuntary or acceptable/inacceptable risks?
- Which are long-term/short-term risks?
- Which are risks at personal, household and community level?
- Which are the opportunities linked with taking certain risks?



1. Resources and assets we have!

Plenary Session: Brainstorming of resources and assets

(land, tools, livestock, cash, jewellery, items of value that can be sold, storable food stocks, skills, kinship networks, community organisation, contacts with NGOs, information, coordination, initiative, unity, etc.)

- Everything mentioned must be listed on a flipchart or poster size paper
- Find categories to classify resources in categories (can be grouped according to three capacities physical/material, social/organisational, motivational/attitudinal)

Discussion:

- Which of the resources are personal ones, which are community ones?
- Are certain resources particular to special individuals or groups?
- Who controls access to and management of community resources?
- How are resources listed used in every day life?
- Are there any resources the community cannot draw on? Why? How could they be utilised? (e.g. access to AMC, academic knowledge)

2. My social resources in times of need

Subgroups: Discuss in group and fill in

Whom do you consult to solve problems and cope with crisis situations? Discuss and prioritise 1 (first) 2 and 3 (last).

1. economic crisis:_1._____2._____3._____

2. personal problems:_1._____2._____3._____

3. disaster situation (name one disaster): _1._____2._____

3._____

4. others:_____:_1._____2._____

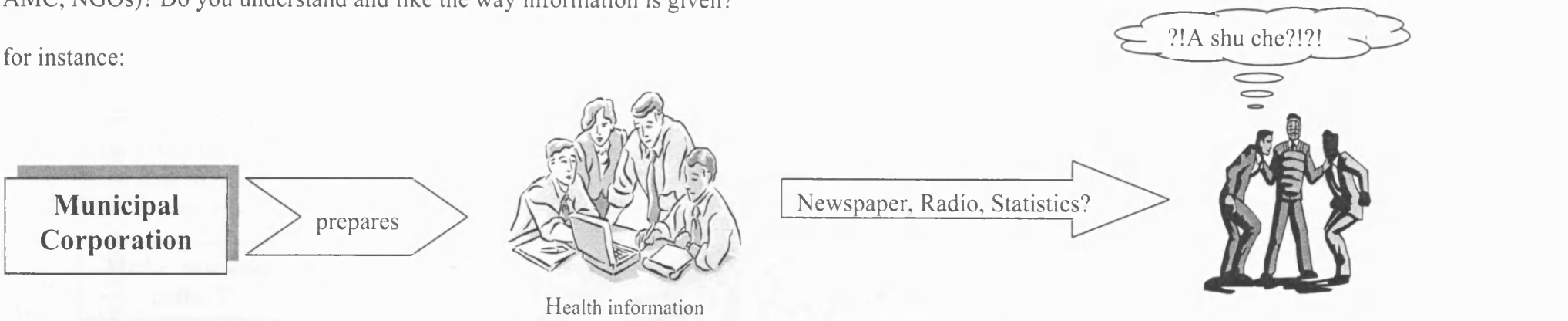
3._____

3. Where do I get my information from?

Subgroups: Discuss in group and fill in

What type of information is available for your household (weather forecasts, early warning of natural disasters, health and hygiene, schemes for the poor/slums, etc.)? Where does the information come from (experience, neighbours, other household members, CBO, community leaders, relatives, AMC, NGOs)? Do you understand and like the way information is given?

for instance:

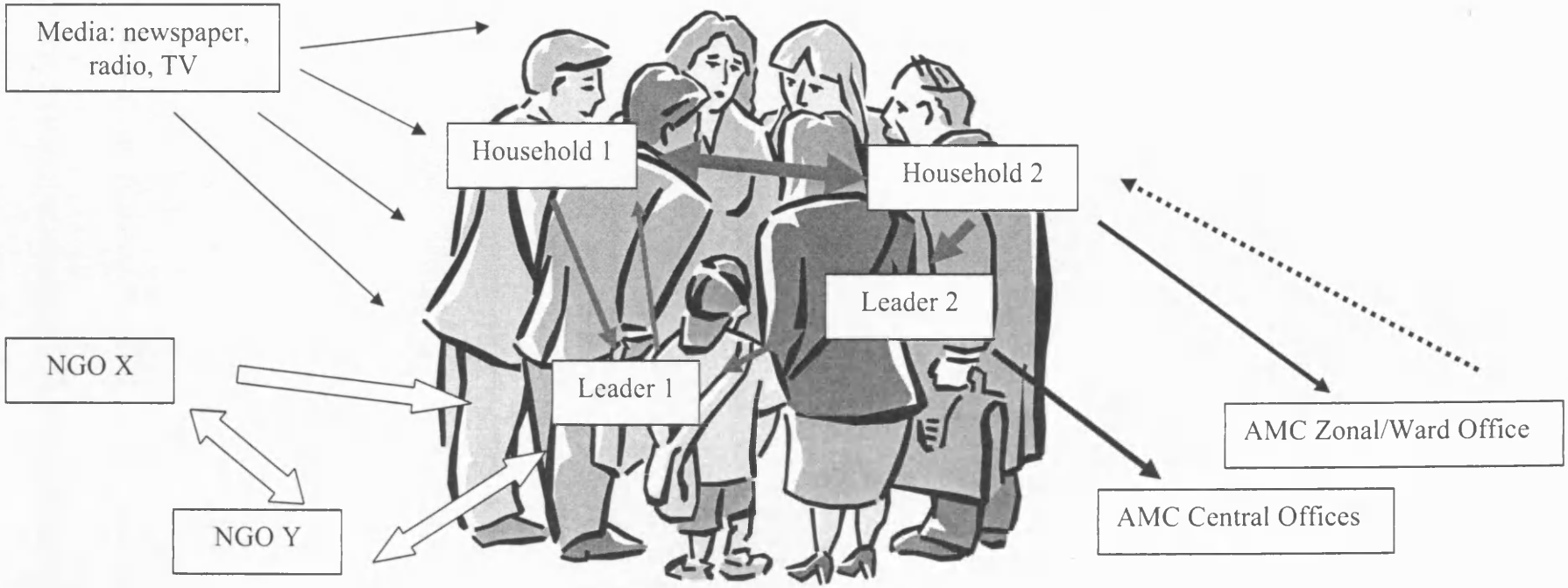


4. How do we communicate?

Plenary session
Diagram of internal and external community decision-making and information flow

To draw the diagram a discussion along the following issues and questions should take place:

- Start with internal decision-making and information flow, then extent towards external linkages like AMC, NGOs, other actors and organisations
- Indicate a) priorities of seeking consultation, b) intensity and frequency of communication, c) type of relationship (tension, trustworthy, credible, conflictive, based on negotiation, etc.), d) level of success (qualitative outcome)
- Type of information passed over between the actors
- Sources of information: Where does information come from, accessibility (radio/TV, which newspapers, NGO publications, AMC, etc.)?
- What kind of information is it, means of communication? (experience, beliefs, myths, numbers, statistics, qualitative, visual, etc.)
- What kind of information is it, means of communication? (experience, beliefs, myths, numbers, statistics, qualitative, visual, etc.)
- How do you receive this information? (personal/impersonal, public meetings, meetings with NGOs, etc.



➲ Day 3 Session – Conclusion women's and men's groups

Comparison of results of women's and men's group sessions. Each group presents its findings to the other. Concluding discussion to contrast different perspectives.
Then identification of risks on community level (ranking and measurement), discussion of strategies and opportunities (what to do to counteract lack of resources and build capacities), and responsibilities of various actors (who can do what and when).

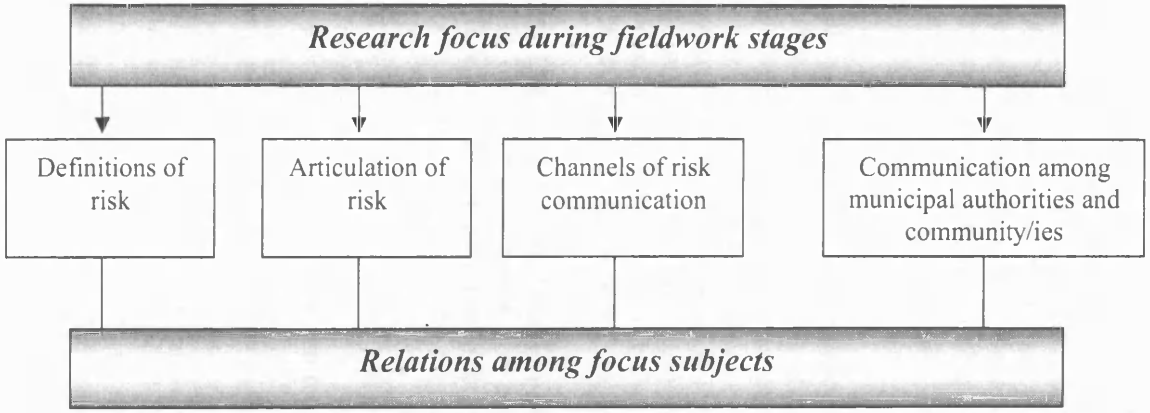
The results of this session should thereafter be presented by the participants to other residents of their area to give opportunity for public discussions. Exhibiting pictures and drawings from the sessions.

3.9 Table: Key Features of Research Techniques for Slum Communities

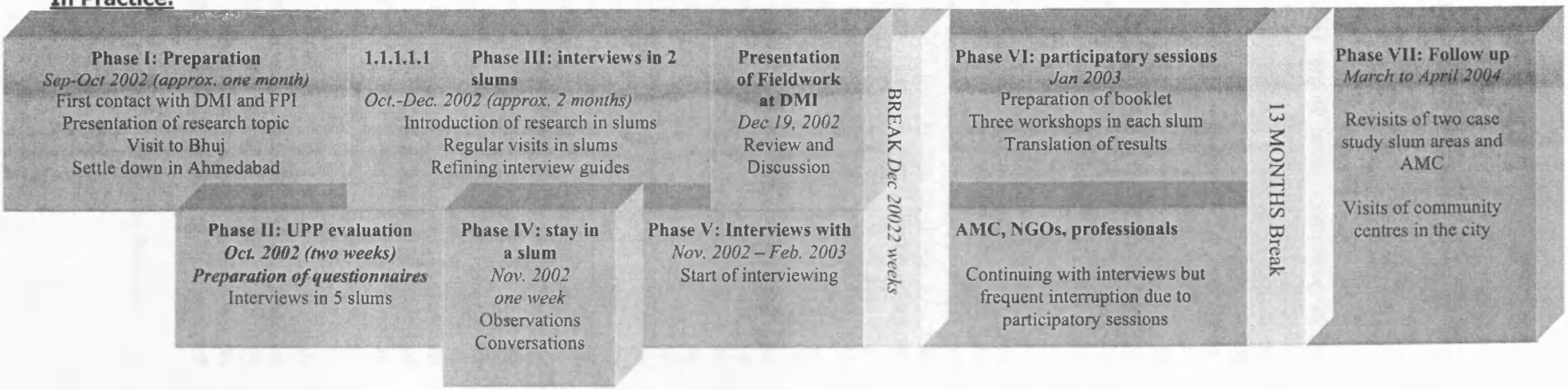
Interview units	*Technique*	*Key features*	*Research issues covered*	*Method of selection*
Slum residents community (based) organisations	**Depth interviews and combination of episodic/narrative interviewing**	Emphasis on personal experience/household/kin groups yields rich detailed and sequential accounts on action & decision making	➢ Risk situations & events ➢ Risk definitions ➢ Risk strategies ➢ Risk priorities ➢ Communication towards other people	sample frame: slums in Ahmedabad, selection of two slum pockets depends on a) SNP completed or not;
Various constellations as they occurred during fieldwork: Women, men, leaders	**Ad-hoc focus group discussions**	Give insight into group dynamics of attitude and opinion change and leadership; Social group dynamics (who speaks and says what)	➢ Risk communication/ articulation within community ➢ Risk definitions/ understandings ➢ Risk priorities ➢ Communication towards municipal authorities ➢ Leadership capacities	b) contact, access and relationship to slum dwellers
Female and male group sessions Mixed sex sessions	**Participatory Workshops**	Sharing and contrasting of experiences builds a picture of common interest and concerns		within slum areas: combination of snowballing, convenience and purposeful sampling
Entire slum areas	**(participant) observation**	Allows for a more holistic understanding of social and meaning relationships; contextualisation of findings regarding risk; ethnographic 'thick description' of circuits of (risk) communication	➢ daily life experience ➢ meaning and knowledge systems	

3.10 Course of Fieldwork and its different Stages

In Theory:



In Practice:



4 Appendix: Chapter V

4.1 Urban Risks and Response in India

Considering the absolute number, India harbours the second largest urban population in the world, amounting to more than 300 million. Nevertheless, since it is one of the least urbanised countries the significance of urbanisation in India must be understood in terms of population rather than the level of urbanisation. Characteristic of the urbanisation process is the continuing trend of metropolitanisation and considerable regional disparities with the four mega cities Delhi, Mumbai, Kolkata and Chennai alone concentrating almost one-fourth of the total urban population (Reddy 2002). Extreme concentration of population would surely subject cities to greater risk of damage of life and property in the event of disaster. Delhi, Mumbai and Calcutta are among the world's twenty most populated cities. With each one exceeding ten million and a large floating population (Jain 2000), these three cities are also considered to be amongst the most vulnerable cities in the world.

The growth of population in urban areas is unprecedented in Indian history. Before 1940, only one city in India had a population of more than one million, by 1991 there were 23 such cities and they are presently close to 40. Around 70 percent of increase in urban population in the last 10 years has occurred in cities with a population above 100,000 mainly due to urban-to-urban migration as a result of concentration processes in the economy (Gadhok 2000). Some estimates project that by 2025 the urban areas will have more than 50 percent share of the total population, from 30.5 percent in 2001. The Ninth Five Year Plan estimates India's population size to be 1178.79 million by 2011, with 32 percent living in cities (NCDM 2002: 42).

As a result, in most of the larger cities, between 30-60 percent people are living in squatter settlements. The divide between the formal and the informal widens with escalating decadal population increase. It is estimated that the informal sector in Mumbai comprises about 70 percent of the total population, in Delhi over 50 percent, and in Ahmedabad about 40 percent or more (DMI/Shapla Neer et al. 2002: 79). Such data underline the assessment that urban poverty[155] is on a rise in India, and with it vulnerability of large parts of the urban population (Loughhead 2002). Following these insights, it is now recognised that especially in the urban situation there is a very fine demarcation between man-made and natural disasters on account of evolution of high-rise buildings, mixed land use, high population density and growth of hazardous industries. In virtue of the urbanisation in India, the urban part of the nation is most vulnerable to disasters, for damage cost in urban areas is proportionately higher in terms of number of people affected due to high density and value of assets in terms of infrastructure and buildings (Suresh 2000). Nonetheless, as Murthy (2004: 175) contends, in these circumstances it is ironically the urban poor that are most at risk to natural hazards as they live in the crowded areas in cities. In promoting a holistic perspective he states, "[...] efforts to mitigate the effects of natural disasters must be made to cover social, economic, environmental and physical dimensions."

City case studies demonstrate the complexity and multitude of occurring risks, as well as the high exposure of poor citizens, thus demonstrating that a perspective which focuses merely on natural disasters is insufficient in the long run. The Asian Urban Disaster Mitigation Program (AUDMP) was one of the first activities to tackle urban risks. Launched in 1995, it focused on demonstration projects in eight Asian countries. The programme adopted a multi-hazard

[155] Note: poverty is understood by Loughhead as a broad concept comprising more dimensions than just income.

approach concentrating on reducing vulnerability of urban populations to technological and industrial hazards with pilot projects in the metropolitan areas of Calcutta and Baroda (Gujarat).

In Delhi and Mumbai (Bombay) authorities have taken initiatives in developing a disaster risk management infrastructure (DMI/Shapla Neer et al. 2002: 76, Ranganathan 2001). However, the continuous growth of smaller cities such as Ahmedabad should be reason enough to take preventive action. In Delhi, a long list of risks was produced for the squatter settlements located there including epidemics, fires, floods/water logging, high wind velocities, pollution and earthquakes. A recent study found that major risks in the Walled City comprise building collapse, fires, earthquakes, traffic congestion, riots and pollution (OCDS et al. 1997). In February 2004 the Delhi Disaster Management Authority was formed. First drafts of Delhi Disaster Management Act, Delhi Disaster Management Policy and Delhi Disaster Management Plan (State level) have been prepared.[156]

The initiative to act in this direction may result from insights gained from the project "Reducing Urban Risk in India" (DFID 1999).[157] The project, launched in 1996 and completed in 1999, was carried out in four vulnerable slum communities in Ahmedabad and Delhi by the NCDM in collaboration with the NGOs SEEDS (Sustainable Environment and Ecological Development Society, Delhi) and DMI (Disaster Mitigation Institute, Ahmedabad). In focusing on reducing risk of natural hazards within low income urban neighbourhoods, the project aimed at developing a method for integrating risk reduction into urban planning with community participation (Bhatt et al. 1999, DFID 1999). While in Delhi one slum settlement and a Walled City neighbourhood were selected for case studies, in Ahmedabad, notably two slum pockets Sinheswarinagar and Meladinagar[158] were selected for action planning activities.

A major objective of the project was to demonstrate the possibility of creating an enabling environment for the poor urban residents. The policy workshop concluded with a number of observations and recommendations including (DFID 1999: 6);

a. Poverty greatly increases disaster, hence risk reduction measures must consider and address poverty
b. The complexity and number of planning regulations and institutions hinder rather than help the poor
c. The focus of interventions in disaster management should shift away from mitigating hazards through the use of technology alone, towards helping the vulnerable through development interventions
d. Risk reduction can only be sustainable if those affected are those in control
e. A sea change is needed in the attitudes of decision makers to develop a culture of collaboration that seeks inclusion in consultation and devolves decision making wherever possible.

[156] Delhi region is a State and as such administered by a Chief Minister and a Legislative Assembly, yet due to its unique function as National Capital Territory of Delhi, the Central government has retained some of the vital functions of a State Government. Jurisdiction of Delhi urban area again is split between several local bodies.

[157] Supported by DFID and the Oxford Brookes University.

[158] Involvement in this project was one criterion to select Meladinagar for this study.

APPENDIX

4.2 Urban Risks and Response in Gujarat

4.2.1 Urbanisation and risks

The state of Gujarat, being the seventh largest and tenth most populous in India also ranks among the most urbanised and prosperous. Although it carries only five percent of the national population, it has 6.5 percent of the national production and more than 12 percent of the national industrial output (Hirway and Terhal 2002: 37). Urban population has experienced a steady increase. About 50 percent of the total population growth during 1981-91 was in urban areas. Thus accentuating that Gujarat is one of the rapidly urbanising states in recent years (Kundu 2002: 101, Gujarat State Urban Slum Policy). Today the urbanisation rate is at 37 percent compared with nearly 28 percent for All-India (table 5.1).

Table 4.1: Urbanisation in India (Census 2001)

State/ Union Territory	Urban Population (million)	% Urbanization
India	285.5	27.78
Tamil Nadu	27.2	43.86
Maharashtra	41.0	42.4
Gujarat	**18.9**	**37.35**
Karnataka	17.9	33.98
Punjab	8.2	33.95

Source: http://www.vibrantgujarat.com/pp/ud_pp.html, accessed 04/02/2005.

As population projections for Gujarat indicate, this trend is to continue in the following two decades (table 5.2). There is a 50 percent growth in urbanisation expected by the year 2025. 50,000 persons are added to Gujarat's towns and cities every month. Gujarat is also the only state where the rate of net in-migration from outside has gone up significantly, both in rural as well as urban areas (Kundu 2002a). While the Ahmedabad agglomeration is expected to reach 10 million by 2025, Gujarat's towns and cities are growing at a rapid pace, with Surat recently being declared as one of India's "boom towns." Currently there are:

- 7 municipal corporations
- 10 class A municipalities – population > 100,000
- 30 class B municipalities – population 50,000 – 100,000
- 44 class C municipalities – population 25,000 – 50,000
- 57 class D municipalities – population 15,000 – 25,000

Table 4.2: Urban Population Projections in Gujarat - 2021

Year	Total Population (million)	Urban Population (million)	% Urbanization
1991	41.31	14.25	34.49
2001*	48.97	18.45	37.35
2011	56.06	22.98	40.99
2016	59.34	25.33	42.69
2021**	62.81	27.92	44.45

Source: Centre for Policy Research 2001 (based on Census of India 1991)
*Provisional Data, Census 2001
**Based on the growth trend during 2011-16

APPENDIX

A remarkable feature of the urbanisation process is the spatial and economic concentration of urban centres in Gujarat. Over time, several urban corridors have emerged, of which the north-south corridor concentrates 60 percent of the state's urban population and contains the three largest metropolitan cities, Ahmedabad, Baroda (Vadodara) and Surat. This corridor is the strongest economic base in Gujarat. These agglomerations harbour prime industrial zones near urban areas, hence are particularly vulnerable to industrial disasters. It is evident that the significance of urban areas increased in terms of their economic power. Towns and cities generate 66 percent of the State Domestic Product (SDP). With seven percent of the State's population, Ahmedabad contributed 14 percent of the SDP in 1977, while in 1995, it contributed 17 percent of the SDP with eight percent population. In 2002, 85 percent of the total sales tax collected was received from six municipal corporations of Gujarat.[159]

In the light of the fast industrial and economic development, issues of the urban environment become more pronounced. Though or perhaps because high levels of economic development are progressing at a rapid pace, infrastructure inadequacies and environmental deterioration are two impediments to the sustained growth of industry and economy in Gujarat. Recent natural hazards like the earthquake and drought have further brought into focus the crisis of availability of water. The most critical environmental concerns in Gujarat include problems of water scarcity, pollution from industrial wastes and emissions, excessive water pollution due to industrialisation, loss of resources and exposure of population to natural and man-made hazards (Centre for Policy Research 2001: 83, 102). These conditions, combined with urban poverty and the proliferation of slum and squatter settlements, aggravate vulnerability to both slow motion and urban disaster risks.

The urban, rural and semi-urban perspective of vulnerability presented by Bhatt demonstrates that urban areas cannot be viewed as disconnected from their hinterland. It is argued that all the three sectors are closely linked with each other. Rural areas are considered more prone to natural disasters whereas urban areas are at risk to a mix of both natural and human-made disasters. More significantly, with goods, products and people flowing from one area to the other also comes the vulnerability, yet this process naturally concentrates in the cities. Big cities like Ahmedabad, Surat, Baroda (Vadodara) and Rajkot are over populated with excessive inflow of migrants who mostly work in the unorganised sector and are forced to live in vulnerable areas. (Bhatt, n/d).

This synopsis of disaster risks and vulnerability in Gujarat demonstrates the cross-cutting character and multi-hazardous threats posed to its population in terms of its societal, cultural, economic, environmental, and natural circumstances. As pointed out, response and preparedness depend on the notion of disaster risks, thereby defining the institutional and structural position. Typically, institutional arrangements for risk management in Gujarat have been developed after disasters struck, thus reflecting a still very strong 'reactive culture' towards disasters rather than the integration in long-term and developmental policies and programmes as ideally outlined in national policies discussed earlier. Nevertheless, the state's history of disasters has made the state a kind of model for other states and the national government.

[159] Information available at http://www.vibrantgujarat.com/pp/ud_pp.html.

4.2.2 Institutional arrangements

As the highest body for disaster management in the state, the Gujarat State Disaster Management Authority (GSDMA) functions as a key monitoring agency for disaster mitigation, preparedness and prevention, rehabilitation and relief. In the same light, and therein following the framework of the report of the HPC and its suggestions, Gujarat state has formulated its own disaster management policy in 2003 with the aim to "ensure the continuity and sustainability of development". Its objectives include efficient communication among stakeholders, awareness creation in the community[160] and strengthening of community capacities to tackle disasters. Only Madhya Pradesh and Orissa have such policies in place, with the plans of a dozen other states in preparation (Sinha 2003: 48).

The GSDMP envisages a framework with a variety of different administrative entities. Municipal Corporations are explicitly included within this framework. In this respect the policy promulgates to leverage the resources and capability of existing bodies like municipal corporations, and build new capabilities wherever necessary. The policy prescribes the role of local authorities in disaster preparedness in terms of facilitating community training, awareness programmes and the formulation of mitigation strategies (i.e. detailed disaster management plans). Notably, a need to install strategies for smooth communication has not been recognised directly as an integral part of the envisaged disaster management plans.

The greatest limitation of the GSDMA though is its near restriction to earthquakes, thereby making it difficult to consider it a body able to tackle all types of disasters equally in a multi-hazardous environment. This disadvantage is evident from the constitution of the GSDMA.[161] Future activities only will show whether these topical constraints are to be lifted. A first step into this direction might be the introduction of the disaster management policy, which is more explicit in the attempt to formulate a holistic approach to multiple hazards.

4.3 Newspaper Article: "Increasing violence in the cities"

In the non-violent towns of Gujarat, violence is increasing. In the newspapers of Gujarat nowadays the news is mostly of violence. This is not something new. The occurrence of violence in Gujarat is now something to worry about. On opening the newspapers one reads about murder, plunder, robbery, rape, suicide etc. The majority of these crimes take place in towns and cities.

Lately in Anand City a seminar was held on 'peace'. The home minister Hiren Pandya speaking at the seminar said that this was the state not only of Gujarat. In this age, in the cities the running about, people's mental state, medical progress, speedy communications all lead to a faster spreading of facts and rumours which all lead to an increase of violence in the cities.

One reason for the increase of violence in the cities is the type of life in the cities. Villages are being destroyed and the burden on the cities is increasing. Poor people are lost in the cities. It is not possible to plan for people to live in the cities in a decent way. Therefore, hutments [slums] are on the increase in the cities. There the influence of violence is greater.

Always due to greater expectations in life people are becoming prone to mental stress. For this reason, the question of throwing rubbish becomes a fight with neighbours that leads to violence. Sons do violence to fathers, brothers murder brothers, such news are no longer new.

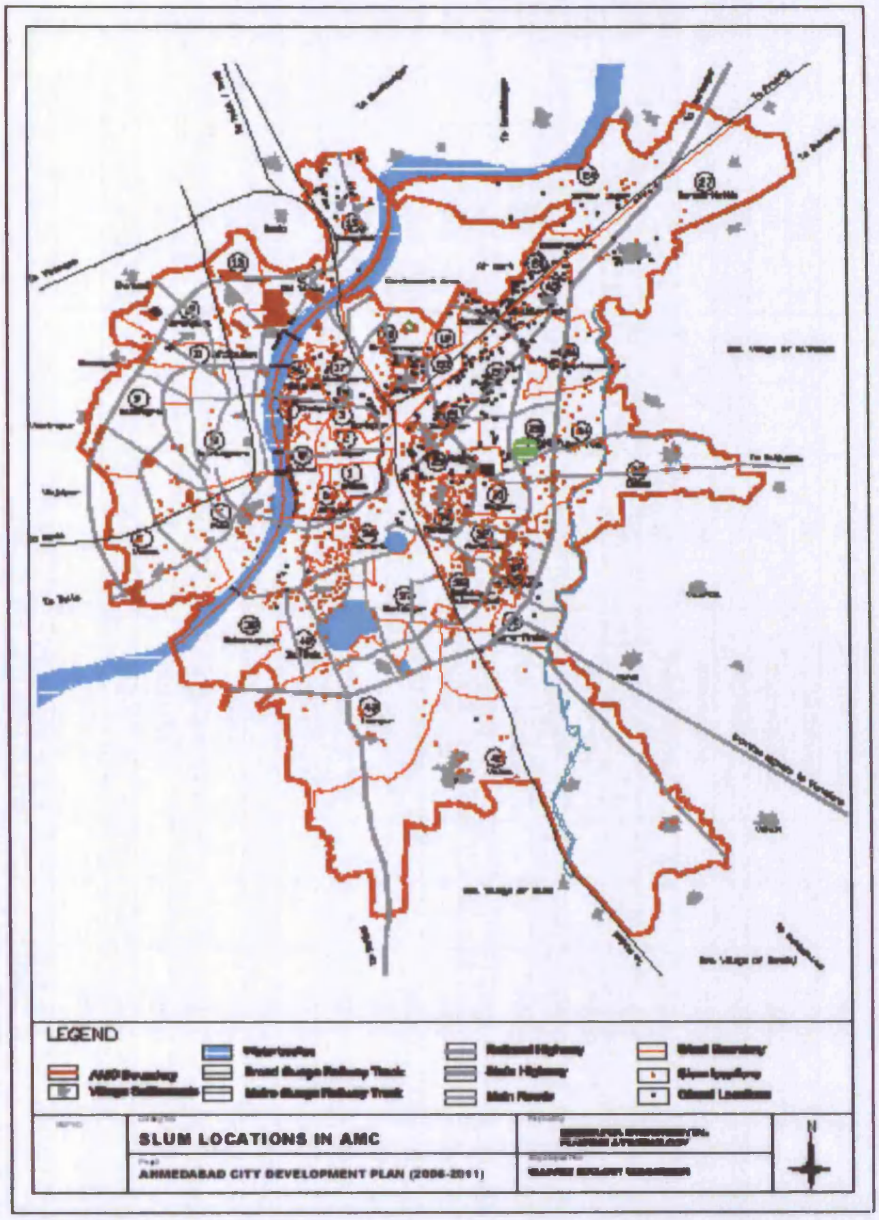
This is not a question only of law and order. Therefore, their solutions do not come with laws. If people's civic needs are not understood and addressed through planning, violence will not easily be controlled. In the social and economic development of the city and its planning, the influence of violence must be considered. Urban planners must go to the root of the problems to confront them.

Source: Nagar Vikas Dagar, May 2000, No.7, published by Urban Planning Partnerships, Ahmedabad.

[160] In this context 'community' refers to 'the general public'.

[161] www.gsdma.org, accessed 09/02/2005.

4.4: Existing Slum Locations in the AMC



source: AMC 2005

5 Appendix: Chapter VI

5.1 Baseline Matrix Nitinagar (continued next page)

	age	*jati* (caste)	religion	household size	occupation of participant	daily income of participant (Rs.)	no. of other earning hh members	total/combined daily income of other hh members (Rs.)	occupation of other hh members	total daily income of entire hh (Rs.)
II-W-01	38	Devipujak	Hindu	6	none	none	1	100	fruit vendor	100
II-W-02	48	Devipujak	Hindu	9	none	none	1	50	casual labour	50
II-W-03	20	Devipujak	Hindu	6	casual labour	25	2	75	vending	100
II-W-04	35	Devipujak	Hindu	5	various businesses	40	1	40	rickshaw,vending	80
II-W-05	30	Devipujak	Hindu	7	none	none	1	100	scrap business	100
II-W-06	35	Devipujak	Hindu	8	none	none	1	100	painter	100
II-W-07	18	Devipujak	Hindu	6	casual labour	25	2	75	casual labour	100
II-W-08	30	Devipujak	Hindu	7	none	none	1	100	fruit vendor	100
II-W-09	30	Devipujak	Hindu	5	none	none	1	50	plastic waste coll.	50
II-W-10	25	Devipujak	Hindu	4	vegetable vendor	25	2	40	veg. vendor	65
II-W-11	30	Devipujak	Hindu	5	housewife	none	1	50-60	veg. vendor	60
II-W-12	50	Devipujak	Hindu	3	none	none	1	100	casual labour	100
II-W-13	22	Devipujak	Hindu	4	vegetable vendor	not given	1	100	veg. vendor	100
II-W-14	25	Devipujak	Hindu	6	none	none	1	50	fruit vendor	50
II-W-15	30	Devipujak	Hindu	5	fruit vendor	50	1	100	fruit vendor	150
II-W-16	35	Devipujak	Hindu	5	?	40	1	60	fruit vendor	100
II-M-01	41	Devipujak	Hindu	6	casual labour	75	1*	n.v.	casual labour	75
II-M-02	45	Devipujak	Hindu	7	fruit vendor	60	none	none	none	60
II-M-03	22	Devipujak	Hindu	7	fruit vendor	100	not clear	40	fruit vend, waste	140
II-M-04	60	Devipujak	Hindu	8	2nd hand clothes	50	1	30	casual labour	80
II-M-05	27	Devipujak	Hindu	6	casual labour	50	none	none	none	50
II-M-06	25	Devipujak	Hindu	5	plastic waste bags	70	none	none	none	70
II-M-07	38	Devipujak	Hindu	5	various businesses	60	1	30	veg. vendor	90
II-M-08	45	Devipujak	Hindu	2	fruit vendor	50	none	none	none	50
II-M-09	36	Devipujak	Hindu	5	scrap collector	40-50	none	none	none	50
II-M-10	28	Devipujak	Hindu	5	vegetable vendor	70	none	none	none	70
II-M-11	60	Devipujak	Hindu	9	?	50	2	65	?	115

	duration of residence (yrs.)	migration from	born in	education of participant	ownership/ rent	remarks
II-W-01	2	Abad	Gojariya vill.	illiter.	rent	--
II-W-02	7	Abad	Abad	illiter.	own	--
II-W-03	7	Abad	Abad	illiter.	own	--
II-W-04	12	Abad	Abad	illiter.	own	--
II-W-05	8	Abad	Mehsana	illiter.	own	--
II-W-06	18	Khokhra	Mumbai	4th pass	own	--
II-W-07	7	Abad	Abad	illiter.	own	--
II-W-08	3	Abad	Gojariya vill.	illiter.	own	--
II-W-09	7	Abad	Abad	2nd pass	own	--
II-W-10	10	Abad	Delmar	illiter.	own	--
II-W-11	10	Abad	Siddhpur	illiter.	own	--
II-W-12	20	Gomtipur,A	Abad	illiter.	own	widow
II-W-13	2	Abad	Abad	illiter.	own	--
II-W-14	10	Abad	Gojariya vill.	illiter.	rent	--
II-W-15	12	Abad	Abad	illiter.	own	--
II-W-16	1	Mahadevng	Gojariya vill.	illiter.	own	--
II-M-01	7	Abad	Mehsana	illiter.	own	--
II-M-02	10	Gomtipur,A	Gomtipur,A	illiter.	own	--
II-M-03	12	Gomtipur,A	Abad	8th pass	own	--
II-M-04	7	Gomtipur,A	Gomtipur,A	10th fail	own	--
II-M-05	8	Gomtipur,A	Abad	illiter.	own	--
II-M-06	7	Abad	Abad	6th pass	own	--
II-M-07	12	Abad	Abad	5th pass	own	leader
II-M-08	22	Gomtipur,A	Gomtipur,A	2nd pass	own	--
II-M-09	16	Abad	Abad	8th pass	own	leader
II-M-10	3	Abad	Abad	9th pass	own	--
II-M-11	10	Gomtipur,A	Gomtipur,A	illiter.	own	--

II-W-01: Nitinagar-women-form 1
II-M-02: Nitinagar-men-form 2

mean age men: 39 years

mean age women: 31 years

mean daily per capita income: Rs. 54,00

mean monthly per capita income: ranging between Rs.540 and Rs.810

mean household size: 5.78

mode household size: 5

median household size: 6

mean duration of residence: 9 years

mode duration of residence: 7 years

median duration of residence: 8 years

* information not secured

Note: More detailed comments on above data follow on page 387.

5.2 Baseline Matrix Meladinagar (continued next page)

	age	*jati* (caste)	religion	household size	occupation of participant	monthly income of participant (Rs.)	no. of other earning hh members	total/combined monthly income of other hh members (Rs.)	occupation of other hh members	total monthly income of entire hh (Rs.)
I-W-01	26	Chamar	Hindu	5	none	none	1	1800*	diamond ind.	1800*
I-W-02	35	Chamar	Hindu	4	masonry	800	1	1000	casual labour	1800
I-W-03	35	Vanakar	Hindu	6	none	none	1	3000	gov. Job	3000
I-W-04	32	Chamar*	Hindu	6	masonry	800	1	1000	cobbler	1800
I-W-05	55	Vanakar	Hindu	5	homebased	n.v.	2	2000*	cotton, diamo.	2000*
I-W-06	45	Chamar	Hindu	8	vending	700	1	1000	mill worker	1700
I-W-07	35	Vanakar	Hindu	5	homebased	500	none	none	none	500
I-W-08	43	Christian	Christian	5	housewife	none	2	4000	mill worker	4000
I-W-09	19	Chamar	Hindu	3	tailoring	1500	1	1800	masonry	3300
I-W-10	25	Chamar	Hindu	4	housewife	none	1	800	agriculture	800
I-W-11	44	not given	Hindu	4	housewife	none	3	1900	mill, factory	1900
I-W-12	52	Christian	Christian	4	housewife	none	2	4500	diamond ind.	4500
I-W-13	26	Chamar	Hindu	8	housewife	none	1	900	drudgery	900
I-W-14	40	Chamar	Hindu	6	none	none	1	800	tailoring	800
I-W-15	38	Chamar	Hindu	7	tailoring?	not given	1	800	tailoring	800
I-W-16	40	Vanakar	Hindu	5	housewife	none	1	1600	masonry	1600
I-W-17	38	Vanakar*	Hindu	5	housewife	none	2	2700	N.A. (?)	2700
I-M-01	49	Garoda Brahm	Hindu	4	unemployed	none	1	1200	priv. press	1200
I-M-02	50	Chamar*	Hindu	8	mill worker	1500	1	2400	machine work	3900
I-M-03	35	Chamar	Hindu	6	masonry	1000	1	200	*imli* homebase	1200
I-M-04	34	Christian	Christian	3	rubber fact.	1800	none	none	None	1800
I-M-05	47	Chamar	Hindu	5	drudgery	800	1	600	drudgery	1400
I-M-06	42	Chamar	Hindu	5	wireman	1500	1	600	casual labour	2100
I-M-07	30	Chamar	Hindu	4	casual labour	1200	none	none	none	1200
I-M-08	53	Chamar	Hindu	2	unemployed	none	1	300	factory work	300
I-M-09	43	Vanakar*	Hindu	6	masonry	1200	1	not clear	masonry	1200
I-M-10	45	Vanakar	Hindu	2	cotton retail	2000	1	1000	not clear	3000

	duration of residence (years)	migration from	born in	education of participant	ownership/ rent	remarks
I-W-01	2	Rajk Distr	Rajkot	3rd pass	rent	--
I-W-02	15	Abad	Sipani vill.	illiter.	own	--
I-W-03	14	Abad	Abad	9th pass	own	--
I-W-04	5	Abad	Abad	illiter.	own	--
I-W-05	7	Kapadhv. Dis.	Garud vill.	illiter.	rent	--
I-W-06	20	Arvind n. Chali	Abad	4th pass	own	--
I-W-07	12	Abad	Dana vill.	7th pass	own	--
I-W-08	18	Abad	Abad	8th pass	own	--
I-W-09	1	Abad	Abad	8th pass	rent	--
I-W-10	Jan 02	Abad	Abad	10th pass	own	--
I-W-11	16	not given	not given	not given	not given	--
I-W-12	11	Abad	Muktipur Gam	7th pass	own	widow
I-W-13	15	village?	Abad	10th pass	own	--
I-W-14	10	Kabirvadi,Aba	Viramgam	4th pass	own	widow
I-W-15	9	Kabirvadi,Aba	Olakh	illiter.	own	--
I-W-16	18	Abad	Abad	4th pass	own	--
I-W-17	10	Abad	Morbi Distr.	illiter.	own	--
I-M-01	20	Abad	Abad	9th pass	own	--
I-M-02	21	Abad	Abad	10th pass	own	CBO leader
I-M-03	7	Abad	Surng. Dis.	10th pass	own	CBO member
I-M-04	2	Abad	Abad	10th pass	rent	--
I-M-05	20	not clear	Abad Distr.	8th pass	own	--
I-M-06	13	Arvind n. Chali	Abad	11th pass*	own	CBO member
I-M-07	4	n.v.	x	10th pass	own	--
I-M-08	22	Abad	Abad	illiter.	own	--
I-M-09	20	Hatharu/kakkarngr	Abad	5th pass	own	--
I-M-10	21	not clear	Abad	S.Y.B.A?	own	CBO member

I-W-01: Meladinagar-women-form 1

I-M-02: Meladinagar-men-form 2

mean age men: 42.8

mean age women: 36.9

mean household size: 5

mode household size: 5

median household size: 5

mean per capita daily income: Rs. 60

mean per capita monthly income: Rs.1,190

mean duration of residence: 12.81 years

mode duration of residence: 20 years

median duration of residence: 14 years

* information not secured

Note: More detailed comments on above data follow on page 387.

APPENDIX

Comments to Baseline Matrices 5.1 and 5.2

Nitinagar, Matrix 5.1:
On account of the uncertainty of income and working days per month it is hard to estimate earnings accurately. However, it is significant but not surprising that women account for a much lower income than men, which ranges from between Rs.25 and Rs.50, whereas men can make between Rs.75 and Rs.100 daily.[162] According to the matrix, the mean daily per capita income comes to Rs.54 for both men and women combined. If this is calculated by 20 working days per month, one arrives at an approximate mean of monthly per capita income of Rs.1,080. Yet this is a theoretical number only, since most respondents said the monthly number of working days varies greatly from between 10-15 and sometimes up to 20 days due to seasonal changes. Hence much more realistic is a mean monthly per capita income ranging from Rs.540 to Rs.810.

The average household has six members with a range from two up to nine persons.
In this area, the averages calculated for duration of residence display three different values (mean 9 years, mode 7 years, median 8 years). They indicate a slightly asymmetrical distribution of the data in the lower half of the total range of duration of residence from 1–22 years.

There is a high rate of illiteracy in this community. Only two of the 16 women who attended the participatory sessions were literate. Similarly, the men did not show much ability in writing even if they had passed fifth or sixth grade. According to the UPP/FPI survey the literacy rate is significantly low with 40% for men and children, and only 20% among the women.

Meladinagar, Matrix 5.2:
Income data in Meladinagar disclosed a divide in earnings generated by women and men respectively. The range of women's income lies primarily between Rs.200 and Rs.800 per month, while men may earn from Rs.800 up to Rs.2,500. In only a few exceptional cases women earn as much as Rs.1,500 from tailoring or more from diamond cutting. Diamond factories are a relatively novel development in Ahmedabad's industrial history, and do not have the significance that the textile mills once enjoyed. However, the diamond industry offers higher income opportunities. Nonetheless, the overall average monthly per capita income level (men and women combined) is still comparatively low at approximately Rs.1,190. Yet this number can be considered more real than the monthly income calculated for Nitinagar, because firstly, the residents provided the monthly and not daily income, and secondly, their employment activities are not as much exposed to seasonal changes as the ones in Nitinagar. On the basis of this, the daily per capita income is an estimated Rs.60 for 20 working days per month. This number is lower than the one for Nitinagar as it is inferred and can only be an approximate theoretical figure. In reality, people do not work for an average of 20 days per month and reportedly their daily income per capita (somewhere between Rs.80 to Rs.150) is higher than the one of Nitinagar residents since in Meladinagar the people are employed in more skilled jobs such as masonry or factory labour.

Household size in Meladinagar ranges between two to a maximum of eight members by an average of five. This means, when compared to Nitinagar, that by a higher income and smaller household size more financial resources are available to each member of a household. This is a crucial difference between the two studied settlements.

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[162] A monthly income is difficult to calculate due to the heavy seasonal dependency of the businesses. In fact, none of the participants provided a number for a monthly income. People admitted that they cannot calculate it because it changes with the number of work days, and these vary between ten and twenty. It therefore would make more sense to consider the annual rather than monthly income. One woman though indicated she would earn approximately Rs.7,000-8000 per year, which comes roughly to Rs.600 per month. Given twenty work days this is not more than Rs.30-40 a day.

With greater differences in the measure of the averages (mean 12.81 years, mode 20 years, median 14 years), the data set on the duration of residence in Meladinagar is more asymmetrical than the one of Nitinagar. Significant in Meladinagar is that in the total range of 1-22 years of residence half of the respondents lived there between 14-22 years. This is at the other end of the scale when compared to Nitinagar.

5.3 Nitinagar: Community Maps

The community maps, an outcome of the participatory group sessions, were drawn by two groups of women and men. These four maps chiefly illustrate issues related to the risk spheres environmental situation and 'natural' events, hence their presentation complements the information at this point. Apart from this they also contain implications regarding other aspects, which, for the sake of completeness, shall be pointed out as well. The following table highlights main characteristics of each map.

It appears that the two men's maps illustrate some more details than the women's maps. However, the essential information is similar in all four maps. In some or the other way major landmarks that define the location are indicated, e.g. the post office, bus stand and the school near the main crossroads, as well as the temple in front of Nitinagar. Within the area, important buildings were marked, including the two leader's residences and the residence of the local corporator who happens to live in Nitinagar. This is significant, as it demonstrates an awareness about the leadership, although the corporator's role appears to be more exclusive.

As to the physical infrastructure, clear statements were given with respect to the public water tap and the gutter, the garbage disposal and dirt at the entrance to the area, and the ditch pools on the main road in monsoon indicating the lack of a drainage system. Surprisingly, none of the maps mentions the fact that the 'police line', visible in all the maps, is used to alternatively fetch water from. Another aspect is remarkable, in men's map 1 one finds an entrance gate to Nitinagar with a nameplate. This does not exist in reality, but can be seen as the wish of its residents to become a proper housing society, just as the Saraswati Apartment in the neighbourhood. This desire may be close to become real if the SNP is implemented. In any case, it shows that the people have a vision and understanding of their right to live there.

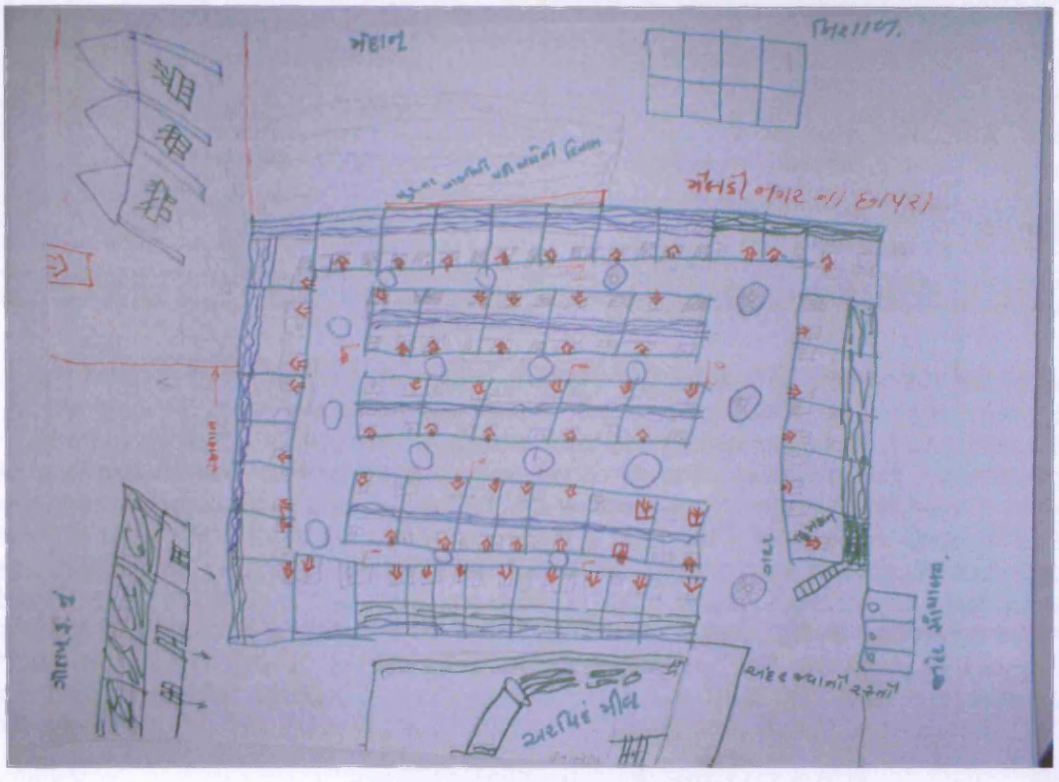
Table 5.1: Nitinagar – Content of Community Maps

Sr. No.	Women Map 1	Men Map 1
1.	➲ public tap and gutter: both are connected so that drinking water gets spoiled	➲ 'police line' (government housing for police)
2.	➲ garbage bin: people always dump the garbage outside the bin, never in it, it's just thrown outside	➲ shops on the area's main road (firewood for *chulas*)
3.	➲ main road: ditch pools, no drainage and sewerage	➲ main crossroads with post office, Vande Mataram Higher Secondary School, AMTS bus stand
4.	➲ street lights shown in main road	➲ in front of main entrance to the area 'emerging houses'
5.	➲ temple: *trishul* (trident) as sign for the goddess and *shikhara* (pinnacle) as symbol for the temple	➲ public water tap and gutter with waste around, and nearby electricity standpost
6.	➲ houses of the two leaders shown	➲ garbage bin and polluted area around it
7.	➲ *pacca* house is corporator's residence, belongs to Nitinagar	➲ temple is symbolised by the *swastik*
8.	➲ coal depot	➲ entrance gate with the name of the area !!
9.	-------	➲ *pacca* houses, among them the two leaders' houses and the corporator's residence
10.	-------	➲ coal depot
11.	-------	➲ Saraswati Apartment
12.	-------	➲ four street lights on main road
Sr. No.	**Women Map 2**	**Men Map 2**
1.	➲ public water tap	➲ main crossroads: Amraiwadi post office, school
2.	➲ ditch pool of dirty water on main road	➲ Saraswati Apartment and 'police line'
3.	➲ garbage bin and garbage around it	➲ public water tap and gutter
4.	➲ one *pacca* house (presumably corporator)	➲ garbage bin with waste around
5.	➲ four street lights on main road	➲ electricity standpost
6.	➲ temple (*mandir*) with *shikhara*	➲ temple
7.	➲ coal depot	➲ main road indicated as unpaved, probably showing water logging or ditch pools
8.	➲ post office as area landmark	➲ coal depot
9.	-------	➲ Keshiben Maphabhai's ground with three houses
10.	-------	➲ leader's houses and *pacca* houses

APPENDIX

Nitinagar Location Map -Sample (drawn by male residents)

Meladinagar Location Map – Sample (drawn by female residents)



5.4 Meladinagar Community Maps

Four maps, two by both women and men groups, were produced during group sessions. Since these maps refer to issues that can be spatially located, they are primarily covered by the risk spheres environmental situation or 'natural' events respectively, and may be utilised as supplementary information to the findings. In order to provide an overview for comparison, a table was created that shows the main features represented in the maps.

Table 5.2: Meladinagar – Content of Community Maps

Sr. No.	Women Map 1	Men Map 1
1.	➲ cotton godown	➲ cotton waste godown
2.	➲ Arvind Mill with air pollution	➲ Arvind Mill showing air pollution
3.	➲ crematory	➲ crematory
4.	➲ open ground (*kolsi nu maidan*, charcoal ground)	➲ on *kolsi nu maidan* a farm (?)
5.	➲ AMC school	➲ K.B. & Sons factory, machinery stalls
6.	➲ four manholes, 13 drainage holes	➲ four manholes
7.	➲ public toilets at entrance	➲ public toilets at entrance
8.	➲ one *pacca* house	➲ Arvind ni Chali
9.	➲ Street lights	➲ opposite house no. 5 a vacant plot
10.	➲ In Gali IV western street light not working	➲ Gali IV one street light not working
11.	➲ Northern lane does not get sufficient water, low pressure, in Gali III eastern and Gali IV western lines affected	➲ houses 66-67, 25-28 do not get sufficient water
12.	➲ Four houses suffered collapsing walls due to 1990 flood	➲ three houses (80-82) collapsing wall due to flood
13.	-------	➲ houses 1-3 and 20 liquor bar
Sr. No.	**Women Map 2**	**Men Map 2**
1.	➲ cotton godown	➲ cotton waste godown
2.	➲ crematory	➲ Arvind Mill and Arvind Mill Road
3.	➲ *kolsi nu maidan* (charcoal ground)	➲ crematory
4.	➲ show all the drainage holes	➲ *kolsi nu maidan* with farm
5.	➲ public toilets at entrance	➲ behind 19b a vacant plot
6.	➲ one street light in Gali IV does not work	➲ three manholes
7.	➲ northern lane does not get enough water; a short note reads: "please solve our water problem!"	➲ houses 66-76, 24-28, 29-33, 38-45, 47-54 do not get enough water
8.	➲ four buildings had collapsing walls in 1990 flood	➲ street lights
9.	-------	➲ public toilets
10.	-------	➲ liquor bar in houses 1-3 and 20

All the maps refer to factories such as cotton godown, the crematory, and Arvind Mill in the vicinity of the area. All these are associated with air and noise pollution, as we have seen. In addition, all maps show the large charcoal ground west of Meladinagar, which is understood to be a source of malaria due to water logging in monsoon. While the women map 1, interestingly, is the only of all four drafts that also depicts the public school, men's map 1 highlights one of the small-scale machinery workshops (K.B. & Sons), which is source of a lot of noise. Common to all four maps, furthermore, is the emphasis on sanitation, i.e. the drainage system, the unwanted public toilets at the entrance of the area, and drinking water supply. Especially the last aspect finds particular attention on account of the insufficient water supply, this is underlined by the note written on women's map 2, "please solve our water problem!" But specifically in the men's maps one finds a detailed account of those houses that suffer from this. Another remarkable point that appears in the four maps is the incident of collapsing walls during heavy rain in 1990.

According to the maps some three to four houses in Gali IV west were affected at that time. This demonstrates how far back the memory reaches when it comes to such obviously important events.

A notable difference between men's and women's map is the fact that the liquor bar, identified as the source of much nuisance, is not even mentioned in the latter's drafts. Various arguments could be brought forward why that is. For instance, male residents also use the liquor bar and therefore it was important to them, but on the other side women and children were conceived as being most at risk. So it should be important to them as well. There was no explanation given for this fact though. The exercise of mapping was seen by the residents as a useful task to clarify and grasp existing conditions in and around Meladinagar. They also demonstrate the existence of detailed local knowledge that also has some historical depth.

APPENDIX

5.5 Aggregated Matrix : Meladinagar and Nitinagar - Risk Spheres and Conditioning Indicators

Indicators conditioning Risk Spheres		Risk Spheres							
		Employment situation	Health situation	Educational situation	Social situation	Riots/violence/ crime	Environmental situation	Natural events	TOTAL
1.	*Insecurity/ casual labour*	••• (40)	•• (19)	••• (18)	•• (15)	••• (35)	• (1)	•• (16)	144
2.	*Monsoon*	•• (18)	• (4)	--	• (1)	--	• (3)	•• (22)	48
3.	*Illness/disease*	•• (8)	••• (22)	• (3)	• (2)	• (2)	•• (22)	•• (11)	70
4.	*Indebtedness*	•• (8)	•• (17)	•• (4)	••• (28)	•• (13)	• (3)	• (5)	78
5.	*Addiction*	• (4)	• (1)	--	• (1)	•• (9)	• (3)	--	18
6.	*Food shortage*	•• (14)	•• (7)	--	• (1)	•• (10)	--	--	32
7.	*Anti-social activities*	• (4)	• (1)	--	--	•• (16)	• (3)	--	24
8.	*Gender*	• (3)	• (1)	• (1)	•• (11)	• (4)	• (4)	--	24
9.	*Harassment*	•• (7)	--	--	• (3)	• (3)	• (4)	--	17
10.	*In-migration*	• (2)	--	--	--	--	--	--	2
11.	*Water crisis*	• (1)	--	--	--	--	--	--	1
12.	*Illiteracy*	• (1)	--	• (1)	--	--	--	--	2
13.	*Dirtiness*	--	•• (9)	• (1)	--	--	•• (17)	• (2)	29
14.	*Infrastructure*	--	•• (12)	--	--	--	••• (30)	• (4)	46
15.	*Children*	--	• (5)	• (1)	• (2)	• (5)	• (2)	--	15
16.	*Belief/faith*	--	• (5)	--	• (7)	• (1)	• (1)	--	14
17.	*Education*	--	• (2)	--	--	--	--	• (1)	3
18.	*Social obligations*	--	--	• (1)	•• (14)	--	--	--	15
19.	*Marriage*	--	--	• (1)	•• (18)	• (2)	--	--	21
20.	*Social Prestige*	--	--	• (1)	• (5)	--	--	--	6
21.	*Relatives/ Family*	--	--	--	•• (17)	• (2)	--	--	19
22.	*Air/noise pollution*	--	--	--	--	--	•• (23)	--	23
23.	*Water-logging*	--	• (2)	--	--	--	• (2)	••• (26)	28
24.	*Earthquake*	--	• (1)	--	--	--	--	•• (23)	23
25.	*Cyclone*	--	--	--	--	--	--	• (9)	9
26.	*Accidents*	•• (7)	•• (7)	•• (5)	--	--	--	--	19
	TOTAL	**117**	**115**	**37**	**125**	**102**	**118**	**119**	**730**

Note: This aggregated matrix serves as complementary information in addition to the disaggregated matrix 6.1 in the text. While differences between the settlements on account of the location, social, economic and other living condions are not visible here, it is possible to get a more generalised picture of the weight of the various risk spheres and the conditioning factors. This is relevant because this method of identifying the relative weight of risk conditions could be deployed in many other slums across the city and thus used for planning purposes. The result would be to have two units of analysis, the whole city as well as each slum area with its specific local concerns.

Legend:

- ••• highest value within a category
- •• medium value within a category
- • weakest value within a category
- (7) frequency of references in interviews

6 Appendix: Chapter VII

6.1 Details of Slums in the Slum Networking Programme[163]

Works Completed

Sr. No.	Name of Slum	Zone	Election Ward	No. of Huts	Approx. Popul.	Est. cost Rs. in lacs[164]	Expend. Rs. in lacs	NGO	"Industrial" Partner
1.	Sanjaynagar	NZ	Potalia	181	1000	21.70	21.70	SAATH	Arvind Mills
2.	Sinheswarinagar	NZ	Naroda Road	43	225	6.37	7.50	SEWA	Lion's Club
3.	Sharifkhan Pathan ni Chali	NZ	Saijpur	98	525	17.26	16.83	SEWA	Lion's Club
4.	**Meladinagar**	**NZ**	**Potalia**	**98**	**500**	**15.50**	**12.68**	**SEWA**	------
5.	Shivajinagar 1	EZ	Bhaipura	74	400	9.53	6.77	-----	Lion's Club
6.	Shivajinagar 2	EZ	Bhaipura	51	265	5.95	2.22	-----	Sanatan
7.	Hanumannagar 1	SZ	Bagefirdosh	147	750	22.16	17.97	-----	Lion's Club
8.	Hanumannagar 2	SZ	Bagefirdosh	147	750	22.56	20.33	-----	Lion's Club
9.	Ghanshyamnagar	EZ	Bhaipura	126	652	14.88	10.24	SEWA	------
10	Azadnagar	SZ	Bagefirdosh	147	1000	27.55	18.45	SAATH	------
11.	K.K. Vishwanathan Chali	SZ	Maninagar	525	3200	101.55	38.0	-----	------
12.	Bava Lavlavinagar	SZ	Baherampura	100	900	33.52	7.90	SEWA	SBI emp. Union
13.	Kailashnagar	SZ	Isanpur	75	650	18.12	4.84	SEWA	------
14.	Jayshaktinagar	NZ	Sardarnagar	145	1000	28.94	18.92	SEWA	------
15.	Ashapurinagar	EZ	Amraiwadi	125	800	23.62	5.63	------	------
16.	Revabanagar	SZ	Bagefirdosh	70	595	10.15	4.63	SEWA	------
	Total			**2152**	**13185**	**382.36**	**214.63**		

Work in Progress/About to be Completed

Sr. No.	Name of Slum	Zone	Election Ward	No. of Huts	Approx. Popul.	Est. cost Rs. in lacs	Expend. Rs. in lacs	NGO	"Industrial" Partner
1.	Pravinnagar Guptanagar 1	WZ	Vasna	1070	6500	182.00	100	SAATH	-----
2.	Patannagar 1&2	EZ	Nikol	400	2000	58.00	9.83	SEWA	-----
	Total			**1470**	**8500**	**240.00**	**109.83**		

Works to be Started[165]

Sr. No.	Name of Slum	Zone	Election Ward	No. of Huts	Approx. Popul.	Est. cost Rs. in lacs	Expend. Rs. in lacs	NGO	"Industrial" Partner
1.	Pravinnagar Guptanagar 2	WZ	Vasna	800	4000	116.00		SAATH	
2.	Indiranagar	EZ	Odhav	200	1000	29.00		SAATH	
3.	Jay Yogeshwarnagar 1&2	WZ	Vasna	} 2000	10000	290.00		SAATH	
4.	Sorainagar	WZ	Vasna					SEWA	
5.	Shiv Shankarnagar	WZ	Vasna					SEWA	
6.	Smajnavrachana	EZ	Nikol	40	200	5.80		SEWA	
7.	**Nitinagar**	**EZ**	**Amraiwadi**	**108**	**500**	**11-12.00**	**?**	**SEWA**	**?**
	Total			**3148**	**15700.00**	**440.80***			
	Grand Total			**6770**	**37385**	**1063.16***	**324.46***		

*without Nitinagar

[163] Extracted from AMC 2002c. These were the last official data available at the time of fieldwork. Other publications rely even on data from 2000. Additional information added by the author.

[164] One lac = 100.000

[165] This section is certainly outdated, and Nitinagar has been added by the author. Works in Nitinagar have been completed in the meantime.

6.2 Newspaper Article: "Water Deluge in Ahmedabad reveals poor Town Planning"

(Nagar Vikas Dagar August 2000, No. 8, Excerpts, translated from Gujarati)

All municipalities should learn from the experience of excessive rain in Ahmedabad. Past urban planning should change not according to the circumstances of today but according to that of tomorrow: On the 13th of July it rained very heavily and the plans of the development of the city too were washed away.

... In the city, especially in the Urban Development Authority (UDA) area, it seemed as if no arrangements were made for dislogging the water. Water was on all sides and life came to a stand still. The areas under the Municipal Corporation were in a better condition. But the people in the UDA areas were prisoners in their own houses. To avoid short-circuits, the electricity board switched off the electricity. Therefore, even though there was water all around, people had trouble getting drinking water as the bore wells were not working.

The authorities on trying to save money had made the arrangements only for 7 to 8 inches rain, but as the rain was very heavy, the situation became very bad. But what was the reason that the water did not subside for 3 or 4 days?...

In the UDA areas the urban planning was approved in 1980. Since then, in the last 20 years there has been an increase in the population. It is seen in the situation caused by one day's rain, that the increase in population was not taken into consideration in the planning... In Gurukul, Vastrapur, Memnagar, Satellite and Vejalpur areas, the population and multi-storey buildings have increased. Unauthorized permissions obtained and haphazard buildings built have obstructed natural ways of dislogging water. On the other hand, the authorities have not been able to keep up with this fast development in these areas. In the UDA areas there is no separate arrangement for drainage. UDA is developing for this on the Ahmedabad Municipal Corporation 'Pyarna Sewage Treatment Plant'. Now, from here drainage pipe lines are being laid...

Because of this extreme situation we see one more example of weak urban planning. As the Vastrapur, Bodakdev areas are low lying areas and the Sarkej-Gandhinagar Highway, which is on a higher level passes by, there is no way of emptying collected water. Finally due to the chief minister's orders, the highway had to be broken to empty out the water. As the Municipal Corporation and the UDA authorities could not take this decision for a long time, the houses of this locality were filled with 3.5 feet water. It is a shame that while planning the highway, a water way (*Nala*) was not foreseen. Ones eyes opened on seeing the damage done to the unauthorized shops in the underground parking space. There is no meaning in a town plan however good it is, if it is not put into effect.

In the same way, it is necessary to solve the problems of areas in the east of the city. This time the well-to-do areas may get help due to protests, but the poor eastern areas have to suffer every monsoon. The usual complaint of the poor people is that due to weak drainage every year their houses fill with water, but in spite of this blocked drains and canals are not unblocked. All the municipal corporations in Gujarat should learn their lesson from the experiences of Ahmedabad. Urban planning should not conform to previous years' situations, but must change and conform to future needs.

A quote that reflects the politicians-builders nexus, one reason of illegal constructions in the city: 'In residential areas in the United States first arrangements are made for water, drainage, gas, electricity, roads, etc. and only after that permission is given for building construction. Here the exact opposite is done. Because of the relationships between the authorities and the builders, first the buildings are constructed and later water, drainage, etc. is thought of. There arrangements are also senseless, a fact which was seen by everyone's bitter experience. The highway had to be broken to remove the water. It is a shame that no one thought of constructing a waterway under the highway'.

APPENDIX

6.3 A Note on the Proposed Special Purpose Vehicle for the SNP

The idea to establish a Special Purpose Vehicle (SPV) came up on account of the difficulties faced while implementing the SNP. The idea of a SPV is not a recent invention and goes back some five years. But it was not developed further after the pilot phase and the drop out of Arvind Mills as one of the partners. Although it is conceived to facilitate the up-scaling and to better include all stakeholders in a formal structure, it has already caused considerable rupture between different internal and external stakeholders. In the current discussion the SPV is a suggestion put forward by the UNDP Water and Sanitation Programme (WSP) under which the SNP is included and which is also linked to the World Bank's Cities Alliance. Till then both the World Bank and WSP officials had met only a few times to discuss the SPV, and there were also misunderstandings about its status. While AMC officials claimed they view the SPV as an extension of the AMC, officials of the World Bank and WSP promoted a privatised body.

It is proposed to register the SPV as a legal body as "Ahmedabad Slum Upgrading Society" (ASUS). The preliminary constitution of the board of the ASUS is envisaged to comprise representatives from:

a) AMC: Deputy Municipal Commissioner, Corporators, Town Development Officer,
b) State Government: collector and/or secretary,
c) NGO representatives,
d) Financing institutions including the private sector: Housing and Urban Development Corporation (HUDCO), micro-financing sector,
e) Slum communities,
f) Academic institutions: e.g. Centre for Environmental Planning and Technology (CEPT).[166]

This board would convene monthly and be in charge of making policy decisions. There will be also executive committees with members other than the general board. These committees would operate under guidelines agreed upon by the general board and would deal with day-to-day issues according to the general policies. The Municipal Commissioner is the chairman of the SPV, because the AMC is the main financial contributor and provides the administrative structures as well.

AMC officials in the SNP-wing expect the SPV to be an instrument which does not follow the "monotonous role of the AMC", with the separate board whose "members do not depend on AMC routine work". The principal role of the AMC would be to approve the budget allocation, whereas the policies will be decided by the board members. It is acknowledged that the proposed SPV would have the advantage that the AMC could dedicate work to the SNP. Yet doubts were raised as to whether this will make a difference in thinking. In order to initiate such a change in attitude, "there should be something drastically changed" regarding the staffing, involvement and capacities of the SNP-wing and other AMC departments as well, in particular community development. Significantly but perhaps not surprising, even in the above list of board members the UCD is not considered.

Although representatives of the NGOs SAATH and SEWA-MHT also have a positive attitude towards the establishment of an SPV, they are more critical. They regard the SPV as a big step forward in the institutional set up of the SNP, since the current SNP-wing is not able to serve the issue in an appropriate manner. NGO staff too believe the SPV will help to overcome bureaucracy and to achieve more autonomy from the AMC. However, they are far from being united in their views. SAATH utters fears that the SPV will be dominated by the AMC, because it is the major

[166] Rajesh Patel, SNP-wing, interview 10/12/2002. This list must be seen as preliminary and incomplete, as negotiations are ongoing.

service provider and as such the chief coordinating and financially contributing partner. Contrary to this opinion, SEWA-MHT firmly believes that the AMC should have the main stake so as not to alienate it, as it had happened during the pilot phase. It is argued such alienation is likely when new actors enter the partnership, and herein rest also the roots of conflicting interests.

The disagreement between the current partners in the SNP with WSP officials is largely due to their activities in trying to bring in new actors in the grown partnership, particularly to include the private sector. Hence, within SEWA-MHT and also the AMC the feeling developed that outsiders want to take over the achievements of their partnership of the last years. On this account, various partners including SEWA, SAATH, SEWA-MHT and the AMC oppose WSP's proposals for the SPV that intends to outsource the expertise and take in outside experts. Generally it seems the present stakeholders are fine with each other, but merely want the bureaucracy minimised and more autonomy. Outsiders, so their argument, would have problems in adjusting to this grown partnership which developed over years and requires a lot of time. They would also not understand the history and background, since they have not been part of the entire process, and hence could perhaps jeopardise the SNP.

It also appears there are power and vested interests among the NGOs in connection with the SPV. It is known that particularly SEWA organisations maintain excellent contacts with the AMC. They know whom to approach to get things done. The SPV as proposed by World Bank and WSP officials would open up the SNP scene to a much broader civil society in terms of allowing access to new and other NGOs and even CBOs, which are then also able to enter the decision-making circle. Interestingly, without being aware of the SPV, Tripathi and Jumani (2001) had proposed an autonomous authority for slum upgrading to detach the issue from the administrative-techno-bureaucratic environment. In it they emphasise that the immediate influence and character of bureaucracy, technocracy and politics must be viewed as a hurdle. It is therefore necessary to have a body which is totally committed to such activities and encompasses various stakeholders. Yet Tripathi asserted, even the proposed SPV appears to him as being still too close to the AMC, as they will dominate it in the board. Explicitly including NGOs, Tripathi pointed out the stakeholders would go only half way and stop there so as to not lose their stakes totally and to be able to follow their interests.[167] However, till date it is not certain whether and how the SPV is being set up.

[167] Tripathi and Jumani, interview 20/12/2002.

6.4 Newspaper Article: "Rise 'n shine, says AMC"

TINA PAREKH
TIMES NEWS NETWORK, MONDAY, DECEMBER 20, 2004

AHMEDABAD: Faced with a slew of Supreme Court (SC) deadlines as well as the outbreak of a number of deadly diseases such as dengue, malaria and falciparum during monsoon, Ahmedabad has just begun to get its act together vis-à-vis implementation of Solid Waste Management (SWM) norms.

But despite launching a symbolic cleanliness drive on October 2, coinciding with Gandhi Jayanti, the city is nowhere near complete implementation of any SWM norm, for which the deadline was December this year. The seven-step implementation plan, as per the SC guidelines, includes no littering on streets, storage of waste and segregation of recyclable waste at source; primary collection from door-step; abolition of all open waste storage sites and replacing them by mobile containers; street sweeping in all residential/commercial areas on daily basis; transportation of waste in closed vehicles; compulsory treatment of solid waste through composting or power generation using appropriate technology; landfilling of rejects — waste that cannot be treated.

So far, even the most basic initiative of creating awareness among people about SWM guidelines has been ignored and so littering and burning of dry garbage continues unchecked. Also, work on constructing scientifically-designed landfill sites, has not even begun. Says PU Asnani, advisor to the AMC municipal commissioner and also on SC committee formed to monitor SWM implementation: "The deadline for improving existing waste disposal sites was December 31, 2001, that for making them ready for operation was December 31, 2002 and identification of landfill sites for future use was December 31, 2003. None of them have been met." While the AMC still has achieved partial success, the 15 municipalities under the Ahmedabad Urban Development Authority (Auda) are nowhere near implementation of SC guidelines. Fraught with lack of resources after the withdrawal of octroi duty, the municipalities are struggling to raise taxes to fulfil the norms. "So far, we haven't had a proper landfill site and have sought Auda's assistance for constructing one only now. As we are smaller civic bodies, co-ordination and raising funds is a regular problem," says Vastrapur gram-panchayat head, Dharamsinh Desai.

The deadlines have been revised several times by the SC, until it finally directed the pollution control boards of various states to submit an action plan of how they will achieve SWM implementation in civic bodies. GPCB chairman KV Bhanujan says: "We are monitoring the implementation of all the norms and have almost completed granting the necessary authorisation for waste disposal to all civic bodies."

Collector D Thara, who is overseeing the SWM implementation in 15 municipalities in the city says, "There are 2-3 municipalities which have begun door-to-door garbage collection and are even segregating waste at source. Others will soon follow. As for a landfill site, Auda has identified one, which the municipalities will be able to use on a costsharing basis." Environment activists, however, say there needs to be political will to achieve complete implementation. "A clear-cut communication and awareness strategy too has to be worked out with implementation plan," says Madhvi Joshi of Centre for Environmental Education (CEE).

Civic officials, meanwhile, say the cleanliness drive will not be successful without people's support. "People need to understand that they will have to lend their support for a clean city," says deputy municipal commissioner, administration, K Randhawa.

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